Agency for Health Care Policy and Research

Center for General Health Services Intramural Research

Trends in Hospital Diagnoses for Black Patients and White Patients: 1980-87

Provider Studies
Research Note

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Abstract

Previous research has identified significant differences in discharge rates between black patients and white patients in the United States. However, most of these studies have been limited to populations from a single payer or have reported on a limited number of diagnoses. This study reports trends and variations in discharge rates for black patients and white patients from a national sample of U.S. hospitals for a comprehensive list of diseases. This study used discharge abstract data from the Hospital Cost and Utilization Project, 1980-87 (HCUP-2), a sample of more than 500 short-term, general, non-Federal hospitals in the United States. The study was based on a random sample of 20 percent of discharges from these hospitals during the period 1980-87, totaling 6.8 million discharges.

The principal diagnosis listed on the discharge abstract was classified into one of 185 mutually exclusive diagnosis categories. Discharges were weighted to the national level and were age- and sex-adjusted through direct methods of standardization. National estimates of discharge rates per 100,000 population per year are presented with confidence interval estimates (CIEs). The estimated annual percent change (with CIEs) is used to summarize trends over time. Detailed graphs and tables are provided for each diagnosis category and statistically significant results are summarized.

This report should serve as the basis for generating hypotheses and guiding research. A number of differences between the races observed in this study are similar to those reported in the literature; other differences identify variations not previously described. Because discharge-level data do not allow for control of alternative explanations for racial differences in discharge rates, such as variations in disease incidence, health care delivery systems, health status, and medical practice patterns, the apparent differences identified can be understood only through more focused research.

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Background

Research Notes are derived from research conducted by the staff of the Division of Provider Studies (DPS), Center for General Health Services Intramural Research, Agency for Health Care Policy and Research (AHCPR). This series provides results of analyses on health policy issues important to the Nation's health care providers and patients.

Overview

DPS was established in 1978 as the Hospital Studies Program. At that time, the Hospital Studies Program was charged with planning and implementing a research program and developing appropriate data resources to explore patterns of hospital use and costs and to analyze hospital behavior in response to changes in Federal policies and in the structure of the industry. Recognizing the changing role of acute care hospitals in the United States, DPS was created in 1989 with a broader mandate—to study the use and cost of services provided by various health care providers, including but not limited to hospitals.

The national and State databases maintained by DPS can be used for studies that address a variety of issues, including:

- Variations in medical practice.
- Diffusion of medical technology.
- Effectiveness of medical treatments.
- Hospital financial distress.
- Utilization by special populations.
- Quality of health services.
- Impact of State and Federal health care reform initiatives.

DPS has the capacity for research at many different levels: hospitalizations, patient care, treatment of diseases, physician practice, hospital group differences, small-area variations, State-to-State comparisons, and changes across time. DPS' hospital research focuses on cost (hospital, disease, and treatment), quality (volume-outcome, treatment variations, adverse events, and guideline diffusion), and access (uncompensated care, HIV/AIDS [human immunodeficiency virus/acquired immunodeficiency syndrome], organ transplantation, and vulnerable populations).

These examples do not exhaust the issues that can be addressed with the DPS databases. DPS staff consult with industry experts, public officials, and other researchers in selecting topics for study.

DPS Databases

The HCUP databases contain the central data supporting the DPS research program. Each database is built around a core of data on inpatient hospital stays.

Hospital Cost and Utilization Project (HCUP-1 and HCUP-2)—Since 1978, the HCUP databases (HCUP-1 and HCUP-2) have grown in both the breadth of their samples and the depth of their hospital and discharge abstract data. These HCUP databases were derived from two national samples of approximately 500 hospitals each and contain nearly 60 million hospital discharges. The HCUP-1 sample spans the period 1970-77; the HCUP-2 sample covers the period 1980-87. In HCUP-1, hospitals were selected from clients of discharge abstracting companies; in HCUP-2, hospitals were added to improve representation of the universe of short-term, general, non-Federal hospitals with at least 30 beds.

Because the data for HCUP-1 and HCUP-2 were collected under special agreements with individual hospitals, only DPS staff have direct access to these data.

Healthcare Cost and Utilization Project (HCUP-3)—DPS is currently in the third phase of the HCUP project, the collection of data for the years 1988-94 from State and private health data organizations. By integrating data from statewide health data organizations, HCUP-3 will create a multi-State database in a uniform format that promotes comparative studies of health care services by researchers both inside and outside AHCPR, thereby providing information to those who shape health policy.

The HCUP-3 hospital inpatient databases are built around core data elements comparable to those in a typical discharge abstract, with safeguards to protect the privacy of individual patients and physicians. There are two hospital inpatient databases. One database provides uniform data on all inpatient stays in all community hospitals in selected States and will be distributed by the States. The second database approximates a 20-percent sample of hospitals and will be distributed through AHCPR. HCUP-3 will also include information on services other than

inpatient hospital care, such as ambulatory surgery centers.

- The *HCUP-3 Statewide Inpatient Database (SID)* will contain 100 percent of hospitals and discharges from States with statewide hospital inpatient data systems selected by DPS. This database will contain common inpatient data elements, variables derived from sensitive data elements, and State-specific variables (such as readmission or community characteristics). Each State database in SID is returned to the respective data source in the uniform HCUP-3 format. Dissemination of those data is controlled by the data source.
- The *HCUP-3 Nationwide Inpatient Sample (NIS)* will include data from about 1,000 U.S. hospitals, approximating a 20-percent sample of hospitals. This database will include core inpatient data elements but will exclude information that could result, directly or indirectly, in the identification of individual patients or physicians. When data sources consider other variables (such as hospital identifiers) to be confidential, those variables will be excluded or encrypted, as required by the State. The NIS will be available to researchers who sign a data use agreement restricting the use of the data to research purposes only.

Inpatient databases are supplemented with data on hospitals and local communities from a variety of sources. The American Hospital Association (AHA) has provided data from its Annual Survey of Hospitals and various special surveys since 1970. County-level statistics are obtained from the Area Resource File, compiled by the Bureau of Health Professions of the Health Resources and Services Administration (HRSA). Statistics from the Bureau of the Census at the ZIP-Code level are also used.

The DPS databases will support a variety of studies to be conducted across hospital types, communities, and time. Studies that are national in scope require NIS. State data from SID can be used to study small-area variations, hospital markets, and State health care reforms. These databases, augmented by the latest available information, permit comprehensive assessment of factors affecting the use and costs of health services.

Acknowledgments

Financial support for DPS has been provided by AHCPR. Parts of HCUP-2 were supported by the Office of the Assistant Secretary for Health and the Office of the Assistant Secretary for Planning and Evaluation.

AHCPR contracting arrangements and data confidentiality safeguards for HCUP-1 and HCUP-2 precluded the identification of individual hospitals, physicians, or their patients. DPS cannot acknowledge individually the contributions they have made to this research; but without such cooperation, the empirical research published by DPS since 1982 would not have been possible.

AHCPR thanks the following discharge abstracting companies for their timely contributions to HCUP-1 and HCUP-2: Commission on Professional and Hospital Activities, Ann Arbor, MI; McDonnell Douglas Health Information Systems Co., Hazelwood, MO; Health Data Service of Maryland (a subsidiary of Blue Cross and Blue Shield of Maryland), Towson, MD; ServiShare of Iowa, Des Moines, IA; Hospital Utilization Project, Monroeville, PA; Quadax, Inc., Cleveland, OH; Utilization Information Service/ Massachusetts Hospital Association, Burlington, MA; Utilization Information Service/Hospital Association of New York State, Albany, NY; Hospital Industry Data Institute, Jefferson City, MO; Shared Medical Systems, Malvern, PA; Commonwealth Clinical Systems, Charlottesville, VA; Infomed Associates, Inc./Rochester Area Hospitals Corp., Rochester, NY; MicroDecision Systems at the Center for Health Affairs, Princeton, NJ; MEDIX/Blue Cross of New Jersey, Florham Park, NJ; Kansas Health Data System/Blue Cross and Blue Shield of Kansas, Topeka, KS; and CHIP of Georgia/Blue Cross and Blue Shield of Georgia, Columbus, GA. In every case, these organizations released discharge abstract data only with the written authorization of the hospitals in the HCUP-1 and HCUP-2 samples. To protect the confidentiality of participating hospitals, data were sent directly to a data processing contractor. All identifying information was removed from files prior to their receipt by AHCPR. In all cases, data were provided with the understanding that analyses, interpretations, and conclusions would be the sole responsibility of AHCPR.

AHCPR also acknowledges, for purposes other than HCUP-1 and HCUP-2, the generous provision of discharge abstract data from State agencies and/or their data processing centers, including the California Office of Statewide Health Planning and Development, Sacramento, CA; the Florida Health Care Cost Containment Board, Tallahassee, FL; the Maryland Health Services Cost Review Commission and the Information Service Center, Baltimore, MD; the New York State Department of Health, Statewide Planning and Research Cooperative System Bureau, Albany, NY; the Massachusetts Health Data Consortium, Inc., Waltham, MA; the State of Vermont, Agency of Human Services, Waterbury, VT; and the Wisconsin Office of Health Care Information, Madison, WI.

In addition to the extensive AHA and American Medical Association data contributions discussed above, other hospital or program files were provided by the Office of Research and the Health Standards and Quality Bureau of the Health Care Financing Administration; the Bureau of Health Professions of the Health Resources and Services Administration; the Association of American Medical Colleges; Abt Associates, Inc.; and the United Hospital Fund.

Several organizations generously shared with DPS the software they developed. They include SysteMetrics, Inc.; Health Systems International; the Health Care Research Department, Blue Cross of Western Pennsylvania; the Commission on Professional and Hospital Activities; the Institute for Health Policy Studies, University of California at San Francisco; and the School of Organization and Management, Yale University.

Data files for HCUP were constructed under the technical direction of AHCPR by SysteMetrics, Inc., Santa Barbara, CA. Programming support for DPS researchers is provided by Social and Scientific Systems, Inc., Bethesda, MD.

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Additional information on DPS and its databases is available from the Division of Provider Studies, AHCPR, 2101 East Jefferson Street, Suite 500, Rockville, MD 20852; phone (301) 594-1410.

Copies of DPS publications are available from the AHCPR Publications Clearinghouse, P.O. Box 8547, Silver Spring, MD 20907; phone toll free 800-358-9295.

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Trends in Hospital Diagnoses for Black Patients and White Patients: 1980-87

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Introduction

Two important missions of the Agency for Health Care Policy and Research (AHCPR) are to foster an understanding of variations in medical care and to set priorities for health services research. The assessment of variations in medical practice patterns has been motivated to a great extent by the results of small-area analyses (Wennberg and Gittelsohn, 1982; Wennberg, Freeman, and Culp, 1987). However, the examination of differences in patterns of care among larger population groups can also identify important areas for further investigation.

Differences among subgroups in discharge rates and changes in discharge rates over time have been attributed to differences in the incidence of disease; changes in coding practices, bed capacity, availability of long-term care facilities, and supply of physician specialists; differences in physician judgment and practice patterns; and the environments of regulation and medical insurance markets, among other factors (Barnes et al., 1985; Ghali, Cooper, and Ford, 1990; Holahan, Berenson, and Kachavos, 1990; Knickman and Foltz, 1985; Office of Surveillance and Analysis, 1989; Wennberg and Gittelsohn, 1982). Many previous studies have been limited to single payers, or they report on individual diagnoses or a restricted range of diagnoses (for example, Health Care Financing Administration, 1990; Rothberg, 1982).

This report compares rates of hospital discharges by principal diagnosis for black patients and white patients based on a national sample of hospitals. It is one of a series of four publications examining variations over time in hospital discharges. Others include:

- All listed procedures by race (Elixhauser, Harris, and Coffey, 1994a).
- All listed procedures by region (Elixhauser, Harris, and Coffey, 1994b).
- Principal diagnosis by region (Elixhauser, Harris, and Coffey, 1995).

This series of publications is based on observations covering an 8-year period (1980-87) that permit evaluation of changes over time among different regions and racial groups. Discharges are age- and sex-adjusted and weighted to provide national estimates of rates per 100,000 population. Point estimates and confidence intervals are presented for the rates for each subgroup in each year, along with a summary measure of trends (estimated annual percent change) and its associated confidence limits.

Methods

Data source

This study uses data from the Hospital Cost and Utilization Project (HCUP), a national sample of hospitals that provide a census of their discharge abstracts. The second round of HCUP (HCUP-2), which spans the years 1980-87, was designed to represent short-term, general, non-Federal hospitals in the United States with 30 or more beds. Hospitals were stratified to ensure representation along several dimensions thought to be important determinants of hospital behavior. These dimensions included geographic region, urban or rural location, teaching status, type of ownership, and bed size. Within these strata, 1,005 hospitals were randomly selected from the American Hospital Association (AHA) universe in 1982. Of these sampled hospitals, 664

voluntarily provided data for HCUP-2. Because hospitals entered or dropped out of the sample over the course of the data collection period, the maximum number of hospitals contributing data to this study in any year is 539, or approximately 10 percent of the universe of U.S. hospitals. Details regarding sampling and stratification are provided in Coffey and Farley (1988).

The HCUP-2 sample is not fully representative of the universe of hospitals from which the sample was drawn. HCUP-2 hospitals are, on average, larger than hospitals in the AHA universe, more likely to be teaching hospitals, less likely to be located in the South, and less likely to be investor owned. Despite these differences, HCUP-2 hospitals are not significantly different from the AHA universe in terms of expenses, staffing, length of stay, and urban or rural location (Coffey and Farley, 1988; Lemrow et al., 1990).

Some conditions, such as mental disorders and congenital anomalies, which are often treated in specialty hospitals, are underrepresented in this study because the HCUP sample is restricted to short-term, general hospitals. In addition, because HCUP is limited to hospital discharge abstract data, medical care provided on an ambulatory basis is not represented.

Each discharge abstract summarizes a patient's hospital stay based on specific information compiled from medical records by trained medical records technicians. The data elements on the abstract document patient characteristics—such as age, sex, and race—and medical information, including specific diagnoses and procedures. HCUP data underwent extensive editing to ensure internal consistency and validity.

Some limitations of HCUP are common to most discharge abstract data. Most discharge abstracts were not created for research purposes; hence, there may be problems with the reliability and validity of certain data elements. Generally, data on admission date, discharge date, age, and sex are most reliable; diagnosis and procedure data are less accurate (Demlo, Campbell, and Brown, 1978). However, the accuracy of diagnosis and procedure data, particularly principal diagnosis and procedure on the discharge abstract, has improved since 1983, when such information became important for determining reimbursement by Medicare and other payers (Fisher et al., 1992). Other problems inherent in discharge abstract data include inconsistent coding across respondents or over time, missing data, and underreporting of minor procedures and of socially stigmatized conditions such as alcoholism or drug abuse.

The unit of analysis for HCUP data is the discharge rather than the patient because linking discharge records for a single patient across hospitalizations is currently impossible for all hospitals in HCUP. Consequently, conditions that result in repeated hospitalizations for an individual within 1 year are counted multiple times, providing an overestimate of the number of patients with these conditions (May et al., 1991).

Study sample

This study was based on a 20-percent random sample of discharge abstracts from HCUP-2. The study sample consists of 6,797,145 discharges from 1980 to 1987.

Diagnosis categories

Nearly all hospital discharge abstracts in the United States classify medical conditions and procedures using the *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD-9-CM) (Public Health Service and Health Care Financing Administration, 1980). This uniform and standardized coding system for recording diagnoses and procedures consists of more than 10,000 condition and 3,500 procedure codes.

For this investigation, all principal diagnosis codes were classified into 1 of 185 mutually exclusive categories using the diagnosis section of the Clinical Classifications for Health Policy Research (CCHPR), version 1. Although many categories represent single diagnoses or a homogeneous group of diagnoses, some infrequent diagnoses are grouped according to the chapters of the ICD-9-CM classification. Appendix A lists all CCHPR diagnosis categories and their constituent ICD-9-CM codes. A complete description of the diagnosis categories can be found in Elixhauser, Andrews, and Fox (1993).[1] Limiting the analysis to principal diagnoses causes diagnoses that tend to appear in secondary positions, such as hypertension, osteoporosis, and Alzheimer's disease, to be underestimated (May et al., 1991). However,

[1] This classification system has been revised, incorporating all ICD-9-CM coding changes through October 1994. The revised CCHPR is available from the lead author.

because the goal is to estimate discharge rates for particular conditions, it is necessary to use only principal diagnoses to avoid double-counting of discharges. Furthermore, the principal diagnosis should represent the major reason for the hospitalization.

Calculation of discharge rates

To derive national estimates of discharge rates per 100,000 population, it was necessary to weight HCUP-2 discharges. Appendix B provides a detailed description of the development of the discharge weights and compares national estimates using HCUP-2 data with those from the National Hospital Discharge Survey.

When the morbidity experience of different population groups is compared, it is possible for underlying differences in characteristics between the populations to bias the comparisons. Standardization (or adjustment) of rates can be used to control for possible differences between populations that are due to variations in the distribution of certain underlying characteristics, such as age and sex. This study minimizes the influence of age and sex on discharge rates through direct standardization, using the 1970 U.S. population as the standard. It should be noted that the choice of the standard population does not affect relative comparisons between subgroups within an analysis. The age groups used in this study are under 15 years, 15-44 years, 45-64 years, and 65 years and over.

Direct standardization applies the observed discharge rate for each age-sex group in the study population to the corresponding age-sex group in the standard population to derive uniformly weighted summary rates for comparison purposes. Because adjusted rates are not invariant to the choice of the standard population, it is inappropriate to compare the rates reported here with unadjusted rates or rates adjusted using a different standard population. Appendix C provides a detailed description of the standardization methodology along with an example.

Calculation of confidence intervals for discharge rates

To compare discharge rates for black patients and white patients in a given year, an estimate of the variance for each rate was calculated and used to derive a 95-percent confidence interval estimate (CIE). Confidence intervals were then compared between races to identify important differences. Confidence limits that did not overlap were considered indicative of a statistically significant difference and were used to characterize the nature of that difference.

Consider the following hypothetical example, in which the estimated discharge rate for diagnosis *X* per 100,000 population among black patients is 260 (95-percent CIE = 245, 275), compared with a discharge rate for white patients of 300 (95-percent CIE = 280, 320). These confidence intervals do not overlap, indicating that the point estimates for the two groups differ significantly ($p < 0.05$). In addition, the upper limit of the interval for black patients is less than the lower limit for white patients, indicating that the discharge rate for diagnosis *X* is significantly lower among black patients.

It may have been preferable to test the hypothesis that the calculated difference in rates was equal to zero because such a test would have provided a more precise determination of the significance of the observed differences. However, the comparison of 95-percent confidence limits is a more conservative test, and it provides a practical means for easily and quickly assessing important differences in this exploratory investigation.

The reader is urged to use caution when interpreting statistical differences reported in this study. Comparisons involving large samples permit small differences to be detected as statistically significant; thus, the clinical importance of any differences must be considered. In addition, multiple statistical tests increase the risk of committing a Type I error (detecting a significant difference that is due to chance alone). Although a smaller alpha level for constructing the confidence intervals would have reduced the risk of committing a Type I error, a 0.05 level was considered reasonable given the exploratory nature of the investigation. Moreover, sufficient information is provided in the tables to reconstruct confidence intervals for a particular diagnosis using a more stringent significance level. Appendix D provides guidance for performing such calculations.

Calculation of estimated annual percent change

The overall nature of the observed trends in discharge rates is summarized using the estimated annual percent change, or EAPC (Miller et al., 1992). The EAPC is derived by fitting a regression line to the natural logarithm of the discharge rates, using calendar year as the independent variable. The EAPC is equal to $100(e^m - 1)$, where m is the slope of the regression line. A negative EAPC indicates that the discharge rate is declining over time; a positive EAPC indicates that the rate is increasing. The standard error of the slope of the regression line was used to generate CIEs that were compared, as described above, to identify trends in discharge rates that differ between races.

Interpreting detailed graphs and tables

For each diagnosis category, a graph illustrates the point estimates and trends for discharges in both racial groups. Note that the scale for the vertical axis of each graph will differ according to the magnitude of the rate of discharges. Thus, caution must be exercised in making temporal comparisons across diagnosis categories based on the graphs alone.

Below each graph is a table that provides the details required for assessing the significance of apparent differences. The table contains point estimates of the discharge rate for each year and for each racial group. CIEs appear below each point estimate; these allow assessment of differences from year to year within a racial group and between races for a given year. The EAPC provides a summary measure of the rate of change over time within each group. The confidence interval formed about the EAPC can be used to determine whether the annual rate of change is significantly different from zero. In addition, comparing the confidence intervals for the EAPCs allows the reader to determine whether the annual rate of change differs significantly between races.

A number of diagnosis categories had discharge rates that were extremely low, yielding unstable estimates. Examples include 1—tuberculosis; 4—mycoses and actinomycoses; 5—HIV (human immunodeficiency virus) infection; 7—other infections, including parasitic; 8—sexually transmitted diseases (not HIV or hepatitis); 13—hepatobiliary cancer; 15—cancer of other gastrointestinal organs, peritoneum; 17—cancer, other respiratory and intrathoracic; 18—melanoma; 24—cancer of other female genital organs; 26—cancer of other male genital organs; 29—cancer of other urinary organs; 31—cancer of thyroid; 32—Hodgkin's disease; 36—multiple myeloma; 44—other carcinoma in situ; 48—nutritional deficiencies; 53—diseases of white blood cells; 56—presenile dementia, including Alzheimer's; 65—developmental disorders; 68—other inflammatory diseases of the central nervous system; 69—Parkinson's disease; 152—other inflammatory conditions of skin; and 169—spinal cord injury, including fracture. These estimates should be interpreted with caution.

Results

This section highlights some findings from the detailed graphs and tables. Tables 1 and 2 identify diagnosis categories for which significant differences in the discharge rates were found between races for at least seven of the eight study years. To summarize these differences, a mean discharge rate was calculated across all eight years. White patients had higher discharge rates than black patients for 30 diagnosis categories (Table 1), including 2 mental illnesses (61—depression and affective disorders, 62—anxiety and personality disorders); 3 circulatory disorders (83—acute myocardial infarction, 84—ischemic heart disease, and 92—aneurysm and disorders of arteries); 3 gastrointestinal conditions (120—noninfectious enteritis and colitis, 122—diverticulosis and diverticulitis, 125—biliary tract disease); and 4 musculoskeletal conditions (158—other joint disorders [not trauma]; 160—osteoarthritis; 161—spondylosis, intervertebral disc disorders, cervical disorders, other back pain; 162—osteoporosis and other disorders of bone and cartilage).

Black patients had higher discharge rates than white patients for 22 diagnosis categories (Table 2). Not unexpectedly, black patients had higher discharge rates for 46—diabetes mellitus, 82—hypertension, and renal disease (131—nephritis, nephrosis; 132—acute and other renal failure; 133—chronic renal failure). A higher discharge rate for black patients was noted for several acute and infectious

illnesses (1—tuberculosis, 8—sexually transmitted infections [not HIV or hepatitis], 140—inflammation of female pelvic organs). A number of diagnoses that may be indicators of inadequate primary care were more often included as principal diagnoses among black than white patients: 49—fluid and electrolyte disorders; 73—epilepsy, convulsions; 103—asthma; 147—pregnancy with abortive outcome; 148—complications during pregnancy; and 153—chronic ulcer of skin.

A comparison of Tables 1 and 2 shows that four malignant neoplasms were more common among white patients (18—melanoma, 19—other cancer of skin [not melanoma], 27—cancer of bladder, 30—cancer of brain and nervous system), and two malignancies were more common among black patients (11—cancer of stomach and esophagus, 36—multiple myeloma). Although white patients were more likely to have diagnoses of 141—endometriosis and 142—prolapse of female genital organs, black patients were more likely to be admitted for 41—benign neoplasm, uterus. Among injury diagnoses, white patients were more likely to be admitted for 167—joint disorders, trauma related, and 168—fracture of neck of femur (hip), whereas black patients were more likely to be hospitalized for 174—open wounds and 177—burns.

Table 3 lists 17 diagnoses that exhibited increasing trends in discharge rates over the 8-year period for both black and white patients. For four of these diagnoses (58—drug disorders, not alcohol related; 84—ischemic heart disease; 89—congestive heart failure; and 175—complication of device or procedure), the trends increased at a sharper rate among black patients than among white patients.

A far larger number of diagnoses demonstrated declining trends over time. Of the 96 diagnosis categories shown in Table 4, 23 are cancers, 11 are gastrointestinal conditions, 6 are female genital problems, and 6 are injuries. Declining trends were more pronounced for white patients with diagnoses of 8—sexually transmitted infections (not HIV or hepatitis); 97—varicose veins of lower extremity; 170—other fractures, not hip; and 172—intracranial injury (not fracture). The rates of decline were larger for black patients for three conditions: 135—calculus of urinary tract, 142—prolapse of female genital organs, and 158—other joint disorders (not trauma).

Conclusion

This study examined trends in discharge rates by diagnosis among black patients and white patients in the United States to identify differences that warrant further investigation. Examples of the types of research questions that can be formulated using these data include the following:

- Are the higher discharge rates for diagnoses of depression and anxiety among white patients related to a higher incidence of these conditions among white persons or to differences between the races in use of mental health services? If differences in use are a factor, are these differences due to access to mental health providers, financing of care, or some other barrier to needed services?
- A number of conditions have been identified as "sentinel events," indicating potential problems in access to primary care (Rutstein et al., 1976). For example, a high rate of hospitalization for asthma among black patients, reported here, has also been noted elsewhere (Wissow et al., 1988) and may be prevented by adequate outpatient followup. But what accounts for the higher discharge rates among black patients for certain infections (1—tuberculosis, 8—sexually transmitted infections (not HIV or hepatitis), 140—inflammation of female pelvic organs) and for complicated pregnancy (147—pregnancy with abortive outcome, 148—complications during pregnancy)? Do the differences in discharge rates between black patients and white patients disappear when controlling for socioeconomic status? Is access to outpatient care a contributing factor?
- White patients had higher discharge rates for traumatic joint disorders (category 167) and hip fractures (category 168), whereas black patients had higher discharge rates for open wounds (category 174) and burns (category 177). What accounts for the racial differences in the trauma diagnoses? What are the causes of these injuries? Are particular age groups more at risk? For example, are the very old among the elderly disproportionately white and do the elderly have more fractures? What interventions can be implemented to reduce these injuries?

- White women are more likely to be admitted for endometriosis (category 141) and prolapse of female genital organs (category 142), whereas black women are more likely to be admitted for benign neoplasm of the uterus (category 41). What accounts for these racial differences in types of conditions affecting the same organ?
- White patients had higher discharge rates for 30 conditions, whereas black patients had higher rates for 22 conditions. Does this disparity reflect a difference in health status between the races or a greater propensity to hospitalize certain patients? Are elective admissions (such as 180—indications for plastic surgery) more frequent among white patients? Are rates for congenital anomalies (category 165) really higher among white persons, or is it simply more likely that white persons will receive hospital care for their conditions?

Because the HCUP database does not include detailed clinical information beyond diagnoses and procedures, this study cannot evaluate the medical appropriateness of particular discharge rates. Low rates of hospital use are not necessarily indicative of poorer care because they may, in fact, represent a more desirable target level. Likewise, higher rates may represent overuse of hospital services and may be associated with poorer outcomes.

This study identified a number of significant differences between the races in the rates and trends of discharges, confirming some reports and identifying other variations not previously described. This report is, however, just the beginning. The intent is to provide a compendium of information for continued hypothesis generation and exploration. Although this study controlled for two demographic correlates of hospital use (age and sex), many other important factors were not considered here. Thus, much of the variation across races may be attributable to differences in the organization of health care services, variations in practice patterns, and other factors that predispose people to different levels of health services use. Further exploration of such factors may help explain some of the variations in medical practice patterns and may provide valuable input for policy decisions aimed at constraining the growth in health care costs and reducing differences in treatment patterns among population subgroups that cannot be explained by patient needs or preferences.

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Table 1
Diagnosis categories with significantly higher rates for white patients than black patients: HCUP-2[1] hospitals, 1980-1987

Diagnosis category	Black	White
	Mean adjusted rate per 100,000 population	
18. Melanoma	1.2	7.4
19. Other cancer of skin (not melanoma)	2.0	11.7
27. Cancer of bladder	16.4	37.4
30. Cancer of brain and nervous system	5.0	12.1
61. Depression and affective disorders	88.7	163.9
62. Anxiety and personality disorders	28.5	47.2
77. Otitis media and related conditions	32.4	88.1
78. Conditions associated with dizziness or vertigo	19.3	35.7
79. Other ear and sense organ disorders	5.9	12.5
83. Acute myocardial infarction	139.4	207.7
84. Ischemic heart disease	387.6	553.8
92. Aneurysm and disorders of arteries	20.1	32.3
101. Other respiratory infections (not tuberculosis)	244.8	395.3
102. Chronic obstructive pulmonary disease and allied conditions	94.3	149.5
117. Appendicitis	49.0	98.7
118. Inguinal hernia	101.7	162.3
120. Noninfectious enteritis and colitis	140.4	209.6
122. Diverticulosis and diverticulitis	45.9	72.1
125. Biliary tract disease	129.3	224.3
135. Calculus of urinary tract	49.8	143.5
141. Endometriosis	20.5	47.5
142. Prolapse of female genital organs	17.1	61.9
158. Other joint disorders (not trauma)	54.5	78.5
160. Osteoarthritis	42.2	71.7
161. Spondylosis, intervertebral disc disorders, cervical disorders, other back pain	191.6	311.5
162. Osteoporosis and other disorders of bone and cartilage	30.3	54.3
165. Congenital anomalies	54.4	84.8
167. Joint disorders, trauma related	61.3	106.8
168. Fracture of neck of femur (hip)	37.0	89.9
180. Indications for plastic surgery	21.7	66.6

[1] HCUP-2 is Hospital Cost and Utilization Project, 1980-87.

Note: Differences are considered significant based on comparison of confidence intervals, as shown in detailed tables; nonoverlapping confidence intervals for discharge rates were present for at least 7 of the 8 years. Rates are adjusted for age and sex differences.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies: Data from the Hospital Cost and Utilization Project, 1980-87.

Table 2
Diagnosis categories with significantly higher rates for black patients than white patients: HCUP-2[1] hospitals, 1980-87

Diagnosis category	Black	White
	Mean adjusted rate per 100,000 population	
1. Tuberculosis	19.9	4.0
8. Sexually transmitted infections (not HIV or hepatitis)	17.8	2.7
11. Cancer of stomach and esophagus	32.4	15.0

See notes at end of table. Data from AHCPR, Division of Provider Studies, Hospital Cost and Utilization Project.

Table 2—Continued
Diagnosis categories with significantly higher rates for black patients than white patients: HCUP-2[1] hospitals, 1980-87

Diagnosis category	Black	White
	Mean adjusted rate per 100,000 population	
36. Multiple myeloma	14.2	7.2
41. Benign neoplasm, uterus	131.5	59.7
46. Diabetes mellitus	328.3	147.0
49. Fluid and electrolyte disorders	106.8	73.2
73. Epilepsy, convulsions	157.4	84.6
82. Hypertension	218.2	72.5
94. Other circulatory disease	43.3	22.9
103. Asthma	264.5	136.4
127. Pancreas disorders (not diabetes)	123.4	37.9
131. Nephritis, nephrosis	14.7	7.4
132. Acute and other renal failure	28.4	12.5
133. Chronic renal failure	87.7	16.2
140. Inflammation of female pelvic organs	152.5	72.4
147. Pregnancy with abortive outcome	231.7	100.3
148. Complications during pregnancy	399.2	227.0
153. Chronic ulcer of skin	44.9	21.8
155. Auto-immune and connective tissue disease	31.8	12.1
174. Open wounds	172.1	91.5
177. Burns	41.8	23.6

[1] HCUP-2 Is Hospital Cost and Utilization Project, 1980-87.

Note: Differences are considered significant based on comparison of confidence intervals, as shown In detailed tables; nonoverlapping confidence Intervals for discharge rates were present for at least 7 of the 8 years. Rates are adjusted for age and sex differences.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies: Data from the Hospital Cost and Utilization Project, 1980-87.

Table 3
Diagnosis categories with significantly increasing trends for both black patients and white patients: HCUP-2[1] hospitals, 1980-87

Diagnosis category	Black	White
Not significantly different by race	EAPC[2]	
2. Septicemia	20.1	17.9
38. Secondary malignancies	6.1	2.0
40. Maintenance chemotherapy, radiotherapy	26.3	19.3
49. Fluid and electrolyte disorders	17.1	19.1
61. Depression and affective disorders	2.8	1.0
93. Peripheral arterial embolism	5.4	1.8
95. Syncope	4.2	1.9
104. Aspiration pneumonitis, food/vomitus	17.7	16.4
121. Intestinal obstruction without hernia	4.4	3.0
132. Acute and other renal failure	5.6	2.1
148. Complications during pregnancy	3.3	3.9
157. Infective arthritis and osteomyelitis	6.0	4.4
182. Rehabilitation care and fitting of prostheses	21.7	26.4

See notes at end of table. Data from AHCPR, Division of Provider Studies, Hospital Cost and Utilization Project.

Table 3—Continued
Diagnosis categories with significantly increasing trends for both black patients and white patients: HCUP-2[1] hospitals, 1980-87

	Diagnosis category	Black	White
	Significantly different by race	EAPC[2]	
58.	Drug disorders, not alcohol related	26.7	19.1
84.	Ischemic heart disease	4.2	2.1
89.	Congestive heart failure	7.1	3.1
175.	Complication of device or procedure	9.3	4.9

[1] HCUP-2 is Hospital Cost and Utilization Project, 1980-87.

[2] EAPC is estimated annual percent change.

Note: Differences are considered significant based on comparison of confidence intervals, as shown in detailed tables.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies: Data from the Hospital Cost and Utilization Project, 1980-87.

Table 4
Diagnosis categories with significantly decreasing trends for both black patients and white patients: HCUP-2[1] hospitals, 1980-87

	Diagnosis category	Black	White
	Not significantly different by race	EAPC[2]	
6.	Viral infections	–2.8	–6.3
10.	Cancer of head and neck	–5.6	–9.7
11.	Cancer of stomach and esophagus	–6.6	–6.0
12.	Cancer of colon-rectum	–4.9	–4.2
14.	Cancer of pancreas	–6.0	–5.0
15.	Cancer of other gastrointestinal organs, peritoneum	–13.3	–11.0
16.	Cancer of bronchus, lung, trachea, larynx	–5.4	–6.3
17.	Cancer, other respiratory and intrathoracic	–16.1	–18.8
18.	Melanoma	–22.0	–11.5
20.	Cancer of breast	–5.1	–2.2
21.	Cancer of uterus	–7.1	–7.5
22.	Cancer of cervix	–14.2	–14.7
23.	Cancer of ovary	–15.8	–12.0
25.	Cancer of prostate	–6.4	–3.9
26.	Cancer of other male genital organs	–17.3	–9.0
27.	Cancer of bladder	–7.9	–8.3
28.	Cancer of kidney	–7.5	–2.6
32.	Hodgkin's disease	–14.3	–11.3
34.	Lymphosarcoma and reticulosarcoma	–14.3	–12.2
35.	Leukemia	–5.9	–9.3
36.	Multiple myeloma	–9.6	–10.5
37.	Cancer, other primary	–9.1	–10.7
39.	Neoplasms of unspecified site or uncertain behavior	–11.4	–13.1
41.	Benign neoplasm, uterus	–1.9	–2.1
42.	Other benign neoplasms	–11.7	–10.2
43.	Carcinoma in situ, cervix	–9.2	–9.1
45.	Thyroid disorders	–7.8	–11.7
46.	Diabetes mellitus	–3.5	–6.3

See notes at end of table. Data from AHCPR, Division of Provider Studies, Hospital Cost and Utilization Project.

Table 4—Continued
Diagnosis categories with significantly decreasing trends for both black patients and white patients: HCUP-2[1] hospitals, 1980-87

Diagnosis category	Black	White
Not significantly different by race—con.	EAPC[2]	
54. Other hematologic conditions	–9.2	–10.1
55. Organic disorders and dementia	–6.1	–6.9
62. Anxiety and personality disorders	–11.7	–10.3
63. Eating disorders and obesity	–5.6	–6.6
65. Developmental disorders	–16.6	–14.4
72. Paralysis	–8.1	–7.9
74. Headache, including migraine	–8.8	–8.6
75. Cataract	–26.5	–29.1
76. Other eye disorders	–9.0	–11.9
77. Otitis media and related conditions	–12.2	–14.2
78. Conditions associated with dizziness or vertigo	–4.7	–8.1
79. Other ear and sense organ disorders	–6.7	–9.0
80. Other nervous system disorders	–7.3	–11.5
81. Acute and chronic rheumatic disease	–6.2	–8.4
82. Hypertension	–10.5	–14.3
86. Other and ill-defined heart disease	–4.8	–9.2
98. Hemorrhoids	–8.8	–9.8
101. Other respiratory infections (not tuberculosis)	–5.9	–7.0
102. Chronic obstructive pulmonary disease and allied conditions	–7.9	–12.5
108. Other upper respiratory diseases	–7.5	–7.5
110. Disorders of teeth and jaw	–14.3	–17.5
114. Duodenal ulcer	–6.0	–7.0
115. Other peptic ulcer	–9.0	–10.8
116. Gastritis, upper gastrointestinal obstruction, nausea	–6.4	–8.1
117. Appendicitis	–4.0	–3.0
118. Inguinal hernia	–10.2	–10.2
119. Other abdominal hernia	–10.9	–9.5
120. Noninfectious enteritis and colitis	–7.8	–9.1
123. Anal and rectal conditions	–7.3	–9.6
125. Biliary tract disease	–3.1	–2.4
126. Liver disease, not alcohol related	–4.0	–5.6
129. Other gastrointestinal disorders	–4.7	–7.2
130. Abdominal pain	–9.1	–9.1
133. Chronic renal failure	–10.1	–7.7
136. Other genitourinary disorders	–12.1	–12.5
137. Hyperplasia of prostate	–3.5	–1.7
138. Other male genital disorders	–14.1	–10.8
139. Nonmalignant breast conditions	–17.8	–19.4
140. Inflammation of female pelvic organs	–7.8	–9.3
141. Endometriosis	–5.0	–3.1
143. Menstrual disorders and ovarian cyst	–15.6	–13.2
144. Menopausal disorders	–16.7	–22.2
145. Infertility	–17.2	–17.6
146. Other female genital disorders	–17.2	–15.2
147. Pregnancy with abortive outcome	–8.2	–9.1
154. Other skin disorders	–13.3	–17.2
155. Auto-immune and connective tissue disease	–7.3	–6.1
156. Acquired foot deformities	–10.5	–7.8
159. Rheumatoid arthritis and related disease	–10.1	–9.8
161. Spondylosis, intervertebral disc disorders, cervical disorders, other back pain	–5.6	–3.0

See notes at end of table. Data from AHCPR, Division of Provider Studies, Hospital Cost and Utilization Project.

Table 4—Continued
Diagnosis categories with significantly decreasing trends for both black patients and white patients: HCUP-2[1] hospitals, 1980-87

Diagnosis category	Black	White
Not significantly different by race—con.	EAPC[2]	
163. Other acquired deformities	–7.0	–3.8
164. Other muscle, bone, connective tissue disease	–8.8	–12.7
165. Congenital anomalies	–10.0	–8.5
167. Joint disorders, trauma related	–13.0	–13.8
171. Sprains and strains	–10.7	–8.4
174. Open wounds	–5.1	–7.3
176. Superficial injury, contusion	–10.2	–11.6
177. Burns	–5.5	–6.2
179. Other external injury	–1.4	–3.6
180. Indications for plastic surgery	–9.8	–9.4
183. Administrative/social admission	–29.9	–28.1
Significantly different by race		
8. Sexually transmitted infections (not HIV or hepatitis)	–4.0	–11.8
97. Varicose veins of lower extremity	–3.8	–10.6
135. Calculus of urinary tract	–6.1	–2.0
142. Prolapse of female genital organs	–7.7	–3.9
158. Other joint disorders (not trauma)	–15.2	–11.7
170. Other fractures, not hip	–2.4	–4.4
172. Intracranial injury (not fracture)	–2.4	–4.8

[1] HCUP-2 is Hospital Cost and Utilization Project, 1980-87.

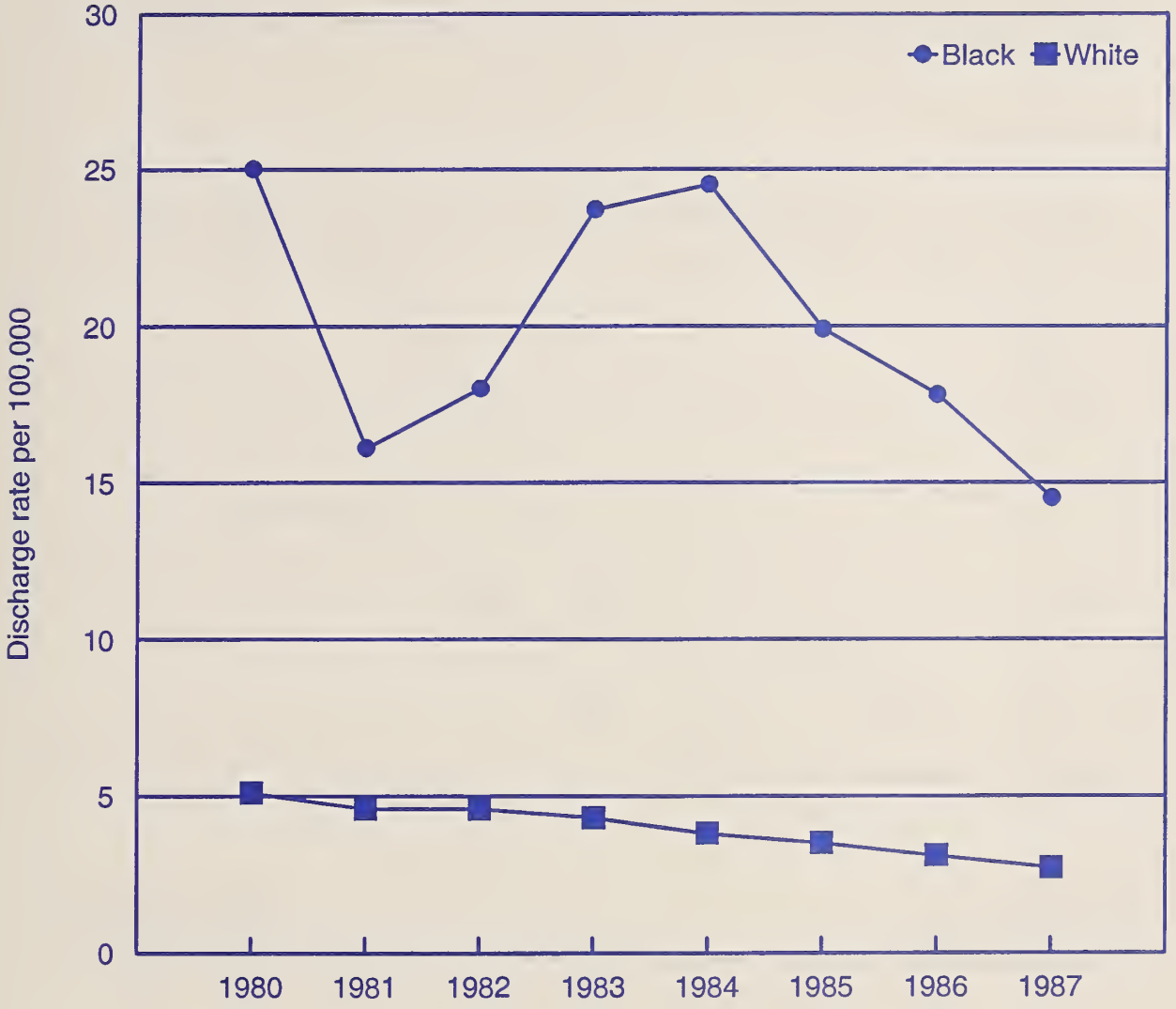
[2] EAPC is estimated annual percent change.

Note: Differences are considered significant based on comparison of confidence intervals, as shown in detailed tables.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies: Data from the Hospital Cost and Utilization Project, 1980-87.

Detailed graphs and tables by diagnosis category

1. Tuberculosis



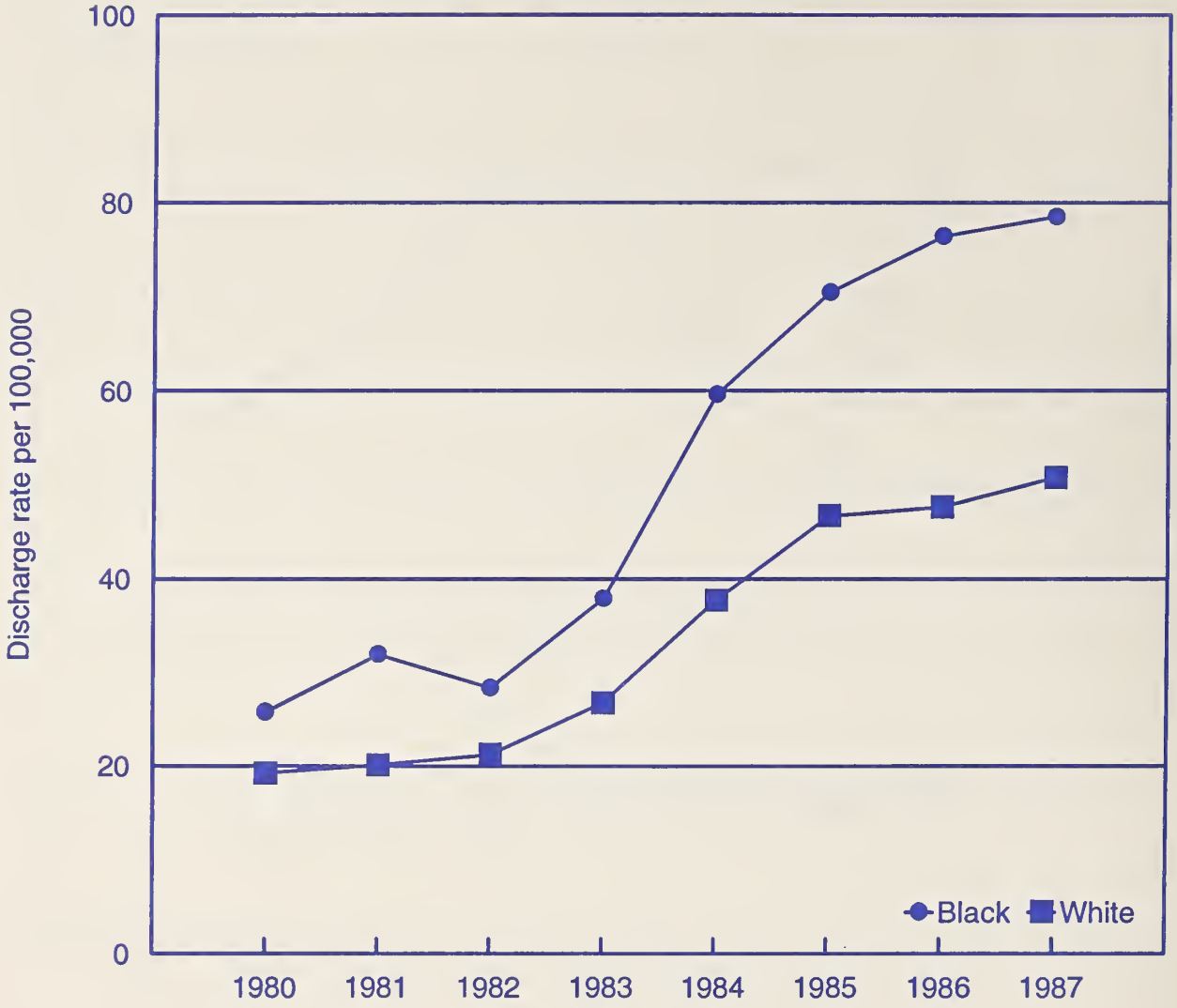
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	25.0 (19.0, 31.1)	16.1 (12.0, 20.2)	18.0 (12.4, 23.6)	23.7 (17.9, 29.6)	24.5 (18.2, 30.8)	19.9 (14.4, 25.3)	17.8 (12.5, 23.1)	14.5 (9.9, 19.2)	-3.5 (-9.1, 2.5)
White	5.1 (4.3, 5.8)	4.6 (3.9, 5.3)	4.6 (3.8, 5.4)	4.3 (3.6, 5.0)	3.8 (3.0, 4.6)	3.5 (2.8, 4.1)	3.1 (2.5, 3.8)	2.7 (2.1, 3.2)	-8.5 (-9.9, -7.1)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

2. Septicemia



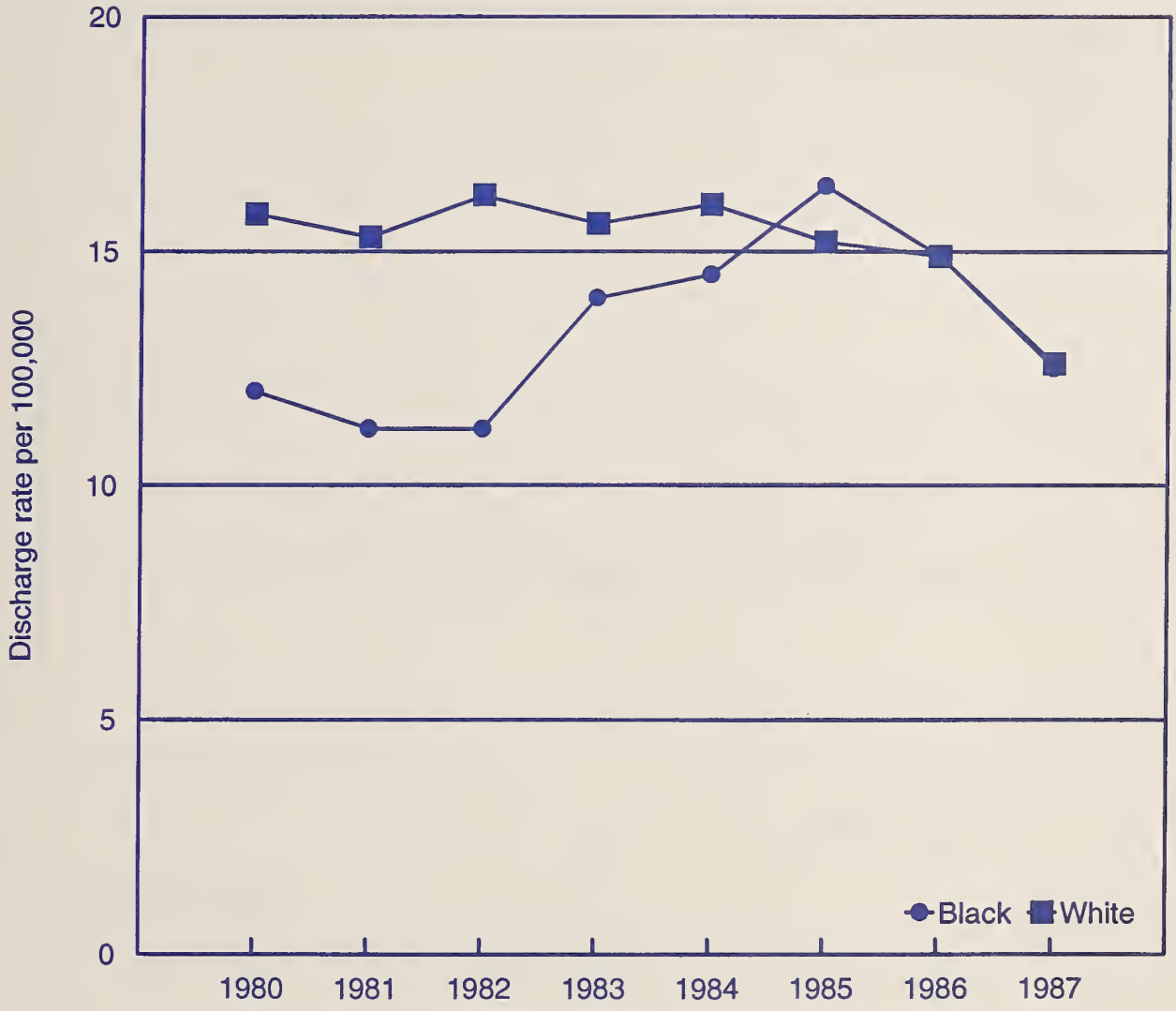
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	25.7 (19.5, 31.8)	31.9 (23.9, 40.0)	28.3 (21.7, 34.8)	37.9 (31.1, 44.8)	59.6 (48.2, 71.0)	70.4 (56.8, 84.0)	76.4 (57.4, 95.4)	78.5 (57.1, 99.8)	20.1 (14.9, 25.5)
White	19.2 (17.2, 21.2)	20.1 (18.1, 22.0)	21.2 (19.3, 23.1)	26.7 (24.6, 28.8)	37.7 (35.2, 40.3)	46.7 (43.3, 50.0)	47.6 (44.3, 51.0)	50.7 (46.5, 54.8)	17.9 (13.9, 22.0)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

3. Other bacterial infections



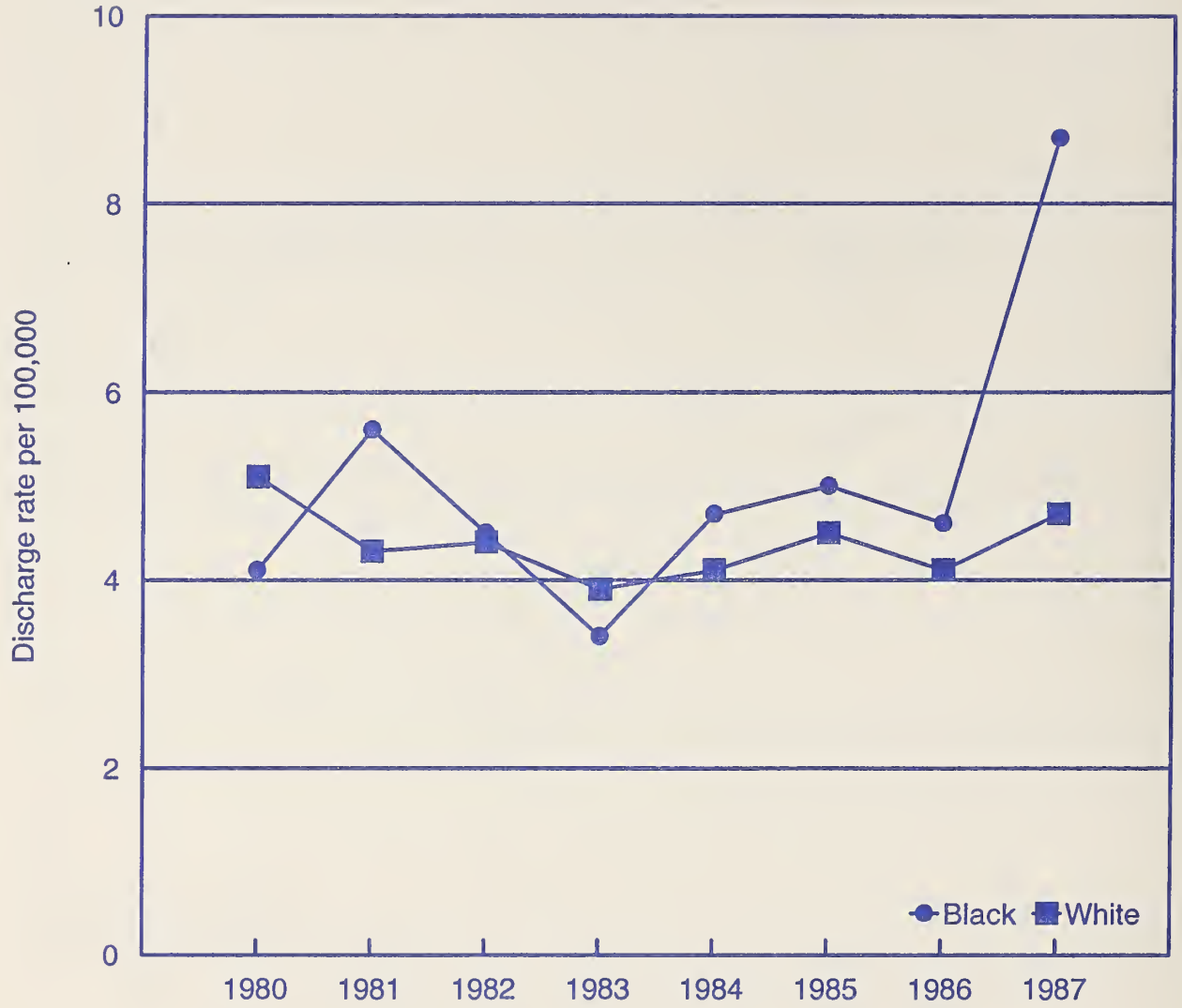
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	12.0 (8.5, 15.6)	11.2 (8.1, 14.3)	11.2 (8.2, 14.3)	14.0 (11.0, 16.9)	14.5 (10.3, 18.7)	16.4 (11.9, 20.9)	14.9 (11.0, 18.8)	12.5 (8.5, 16.4)	3.4 (–0.3, 7.4)
White	15.8 (13.7, 17.9)	15.3 (13.7, 16.9)	16.2 (14.5, 17.9)	15.6 (14.0, 17.2)	16.0 (14.4, 17.6)	15.2 (13.5, 16.8)	14.9 (13.1, 16.6)	12.6 (11.1, 14.2)	–2.2 (–4.0, –0.4)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

4. Mycoses and actinomycoses



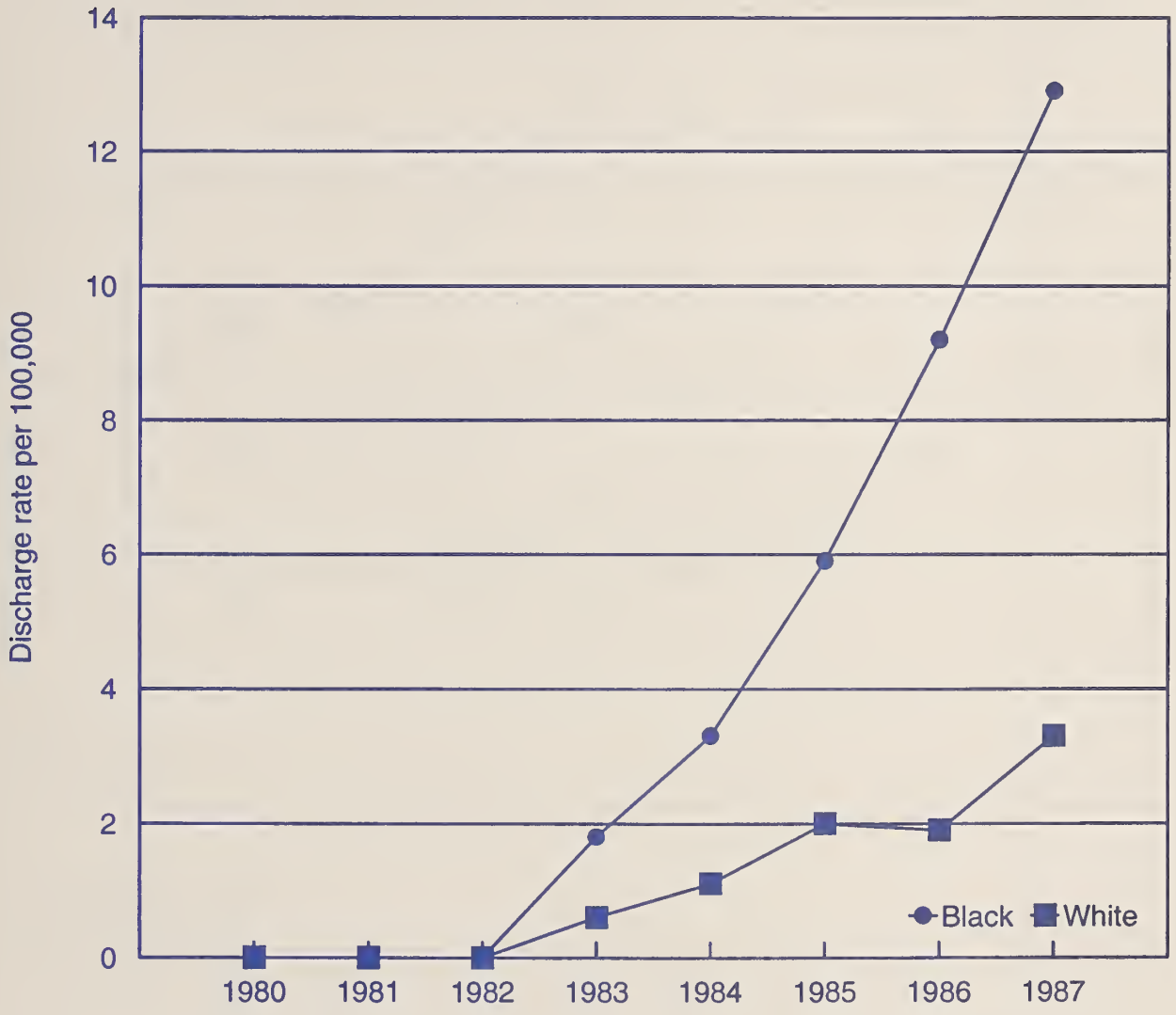
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	4.1 (2.1, 6.1)	5.6 (3.5, 7.7)	4.5 (2.5, 6.4)	3.4 (2.0, 4.9)	4.7 (2.9, 6.6)	5.0 (3.1, 6.8)	4.6 (2.8, 6.5)	8.7 (3.1, 14.3)	6.1 (–1.5, 14.3)
White	5.1 (3.9, 6.2)	4.3 (3.5, 5.0)	4.4 (3.7, 5.1)	3.9 (3.2, 4.6)	4.1 (3.3, 5.0)	4.5 (3.7, 5.3)	4.1 (3.3, 4.9)	4.7 (3.1, 6.4)	–0.7 (–3.3, 2.1)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

5. HIV (human immunodeficiency virus) infection



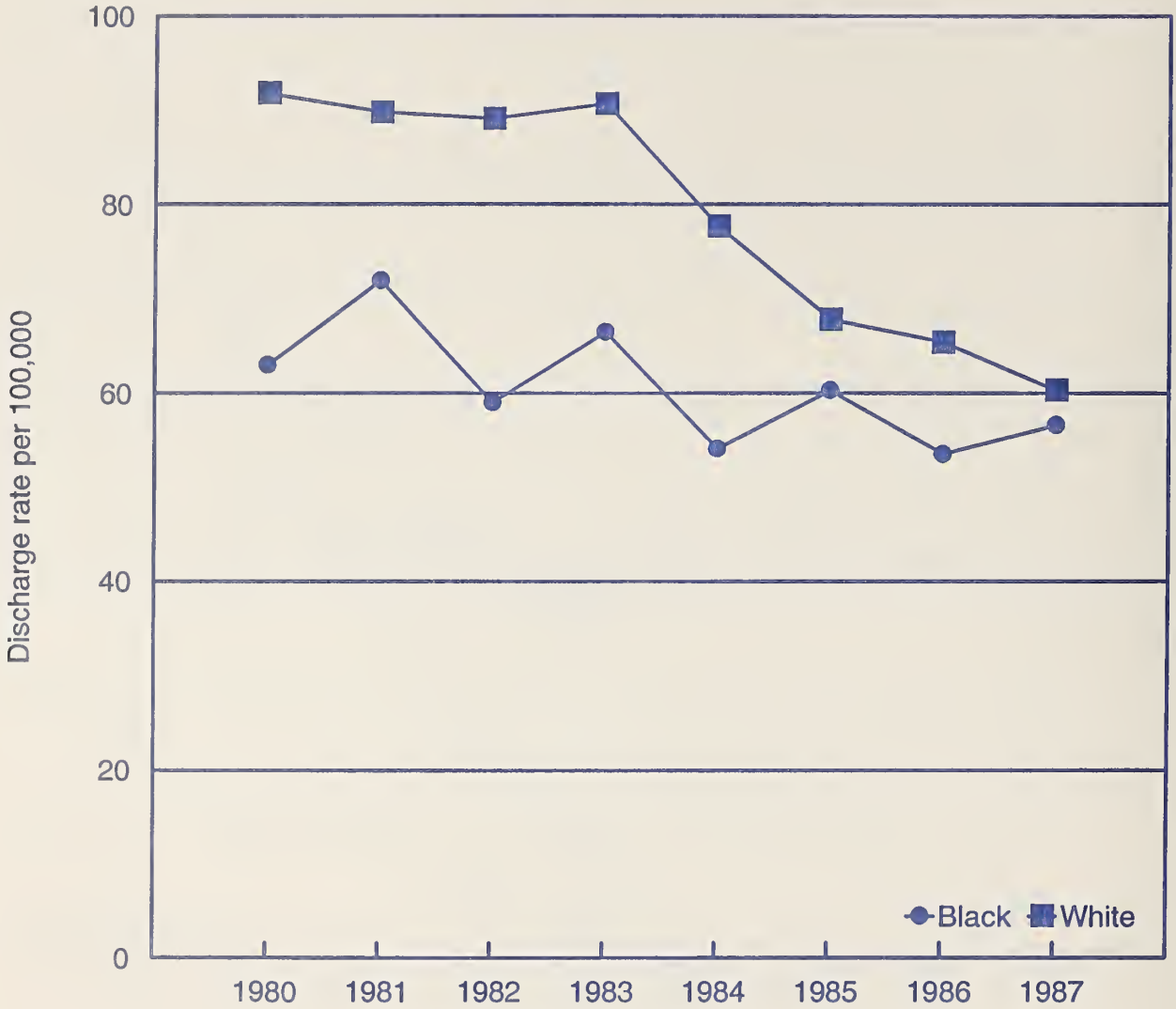
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	0 (—, —)	0 (—, —)	0 (—, —)	1.8 (0.6, 2.9)	3.3 (1.1, 5.4)	5.9 (3.3, 8.5)	9.2 (4.8, 13.6)	12.9 (7.6, 18.1)	— (—, —)
White	0 (—, —)	0 (—, —)	0 (—, —)	0.6 (0.3, 0.9)	1.1 (0.5, 1.6)	2.0 (1.4, 2.6)	1.9 (1.2, 2.7)	3.3 (2.4, 4.1)	— (—, —)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

6. Viral infections



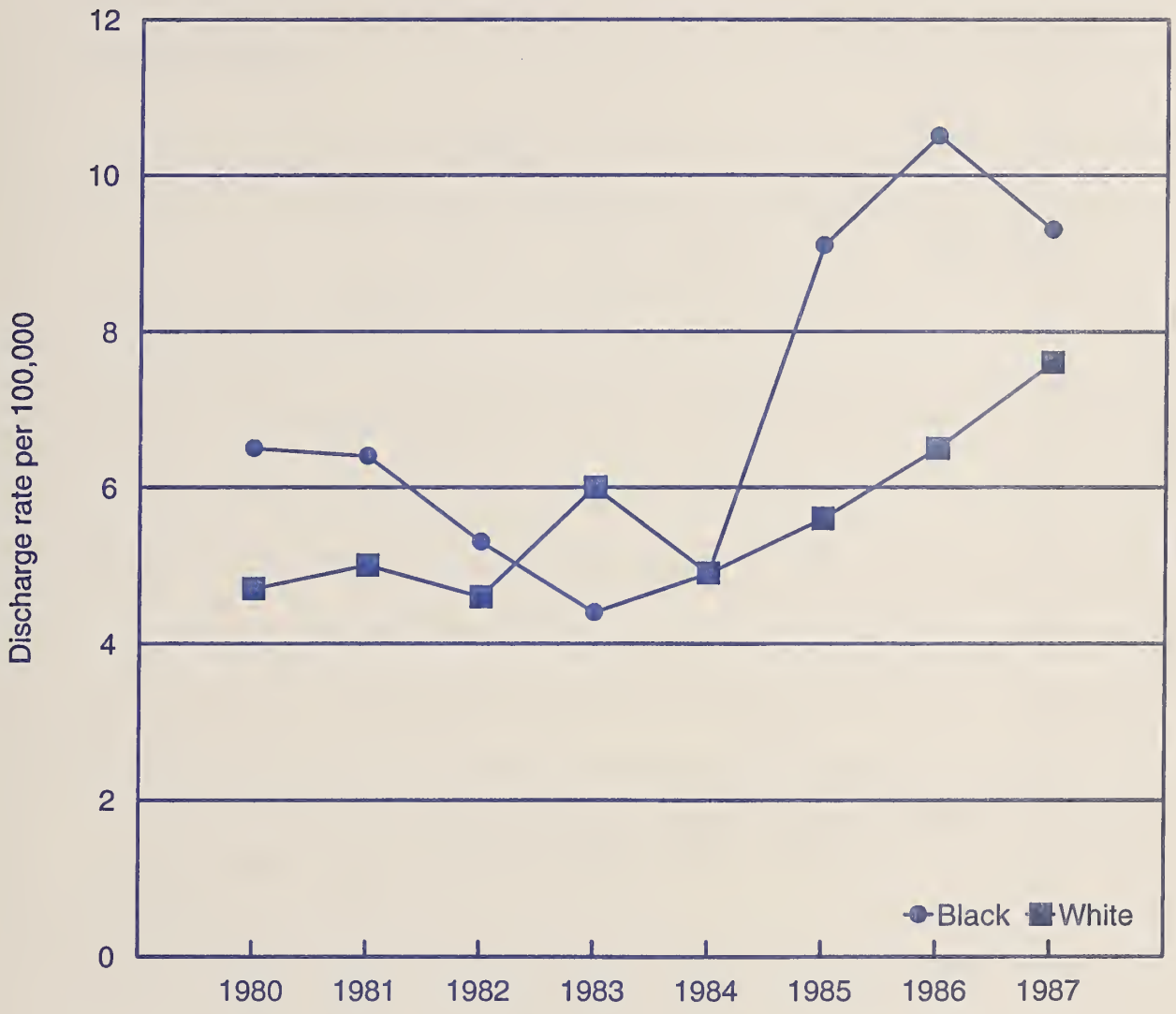
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	63.0 (51.5, 74.4)	71.9 (58.8, 85.0)	59.0 (48.6, 69.3)	66.5 (56.0, 76.9)	54.1 (44.8, 63.4)	60.3 (49.3, 71.3)	53.5 (41.5, 65.5)	56.6 (45.0, 68.2)	-2.8 (-5.1, -0.3)
White	91.8 (84.9, 98.6)	89.8 (83.3, 96.4)	89.1 (82.1, 96.1)	90.7 (84.7, 96.8)	77.7 (72.1, 83.3)	67.8 (62.2, 73.4)	65.4 (60.2, 70.6)	60.3 (55.4, 65.2)	-6.3 (-8.1, -4.5)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

7. Other infections, including parasitic



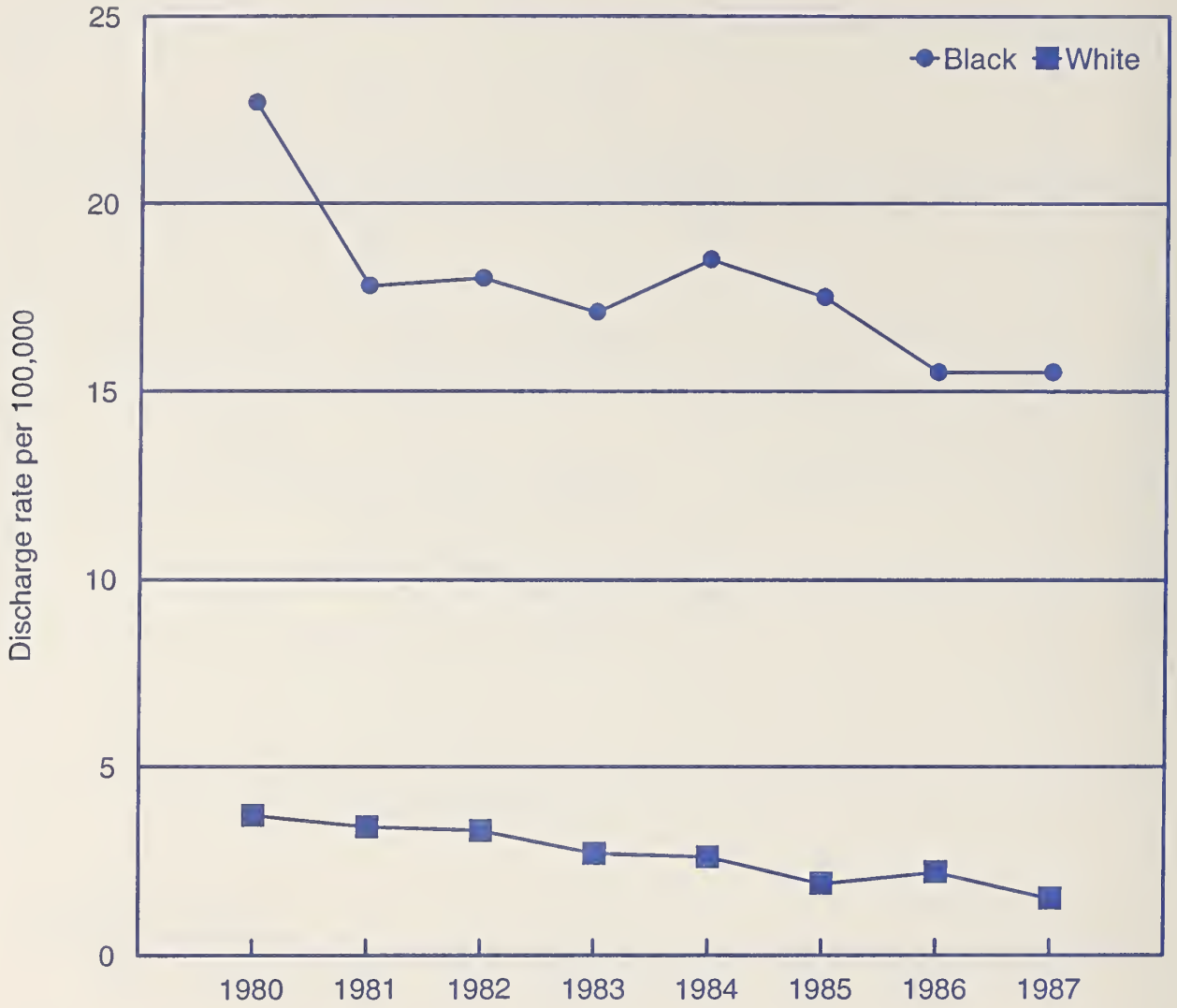
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	6.5 (4.0, 9.0)	6.4 (3.3, 9.4)	5.3 (3.3, 7.2)	4.4 (2.6, 6.1)	4.9 (2.6, 7.2)	9.1 (5.9, 12.3)	10.5 (5.1, 15.9)	9.3 (5.0, 13.6)	8.4 (–0.4, 18.0)
White	4.7 (3.9, 5.6)	5.0 (4.0, 6.0)	4.6 (3.9, 5.4)	6.0 (4.8, 7.1)	4.9 (3.9, 5.8)	5.6 (4.5, 6.8)	6.5 (5.1, 7.9)	7.6 (5.8, 9.4)	6.1 (2.8, 9.5)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

8. Sexually transmitted infections (not HIV or hepatitis)



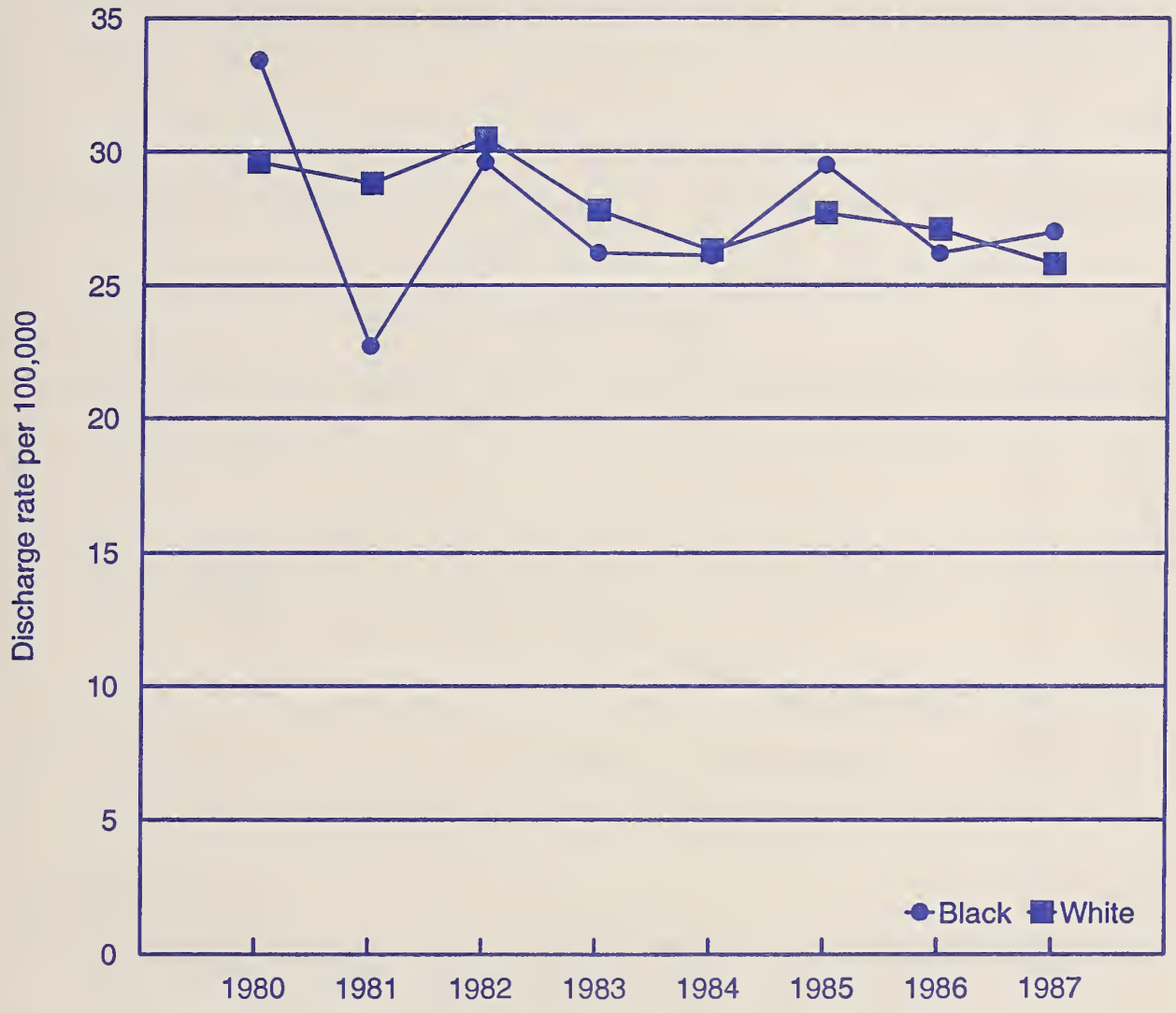
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	22.7 (16.2, 29.3)	17.8 (13.3, 22.3)	18.0 (13.7, 22.3)	17.1 (11.2, 23.0)	18.5 (12.7, 24.2)	17.5 (12.7, 22.3)	15.5 (11.4, 19.5)	15.5 (10.3, 20.7)	–4.0 (–6.1, –1.8)
White	3.7 (3.1, 4.4)	3.4 (2.8, 4.1)	3.3 (2.8, 3.8)	2.7 (2.3, 3.2)	2.6 (2.1, 3.1)	1.9 (1.5, 2.2)	2.2 (1.7, 2.7)	1.5 (1.0, 1.9)	–11.8 (–14.6, –8.9)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

9. Fever of unknown origin



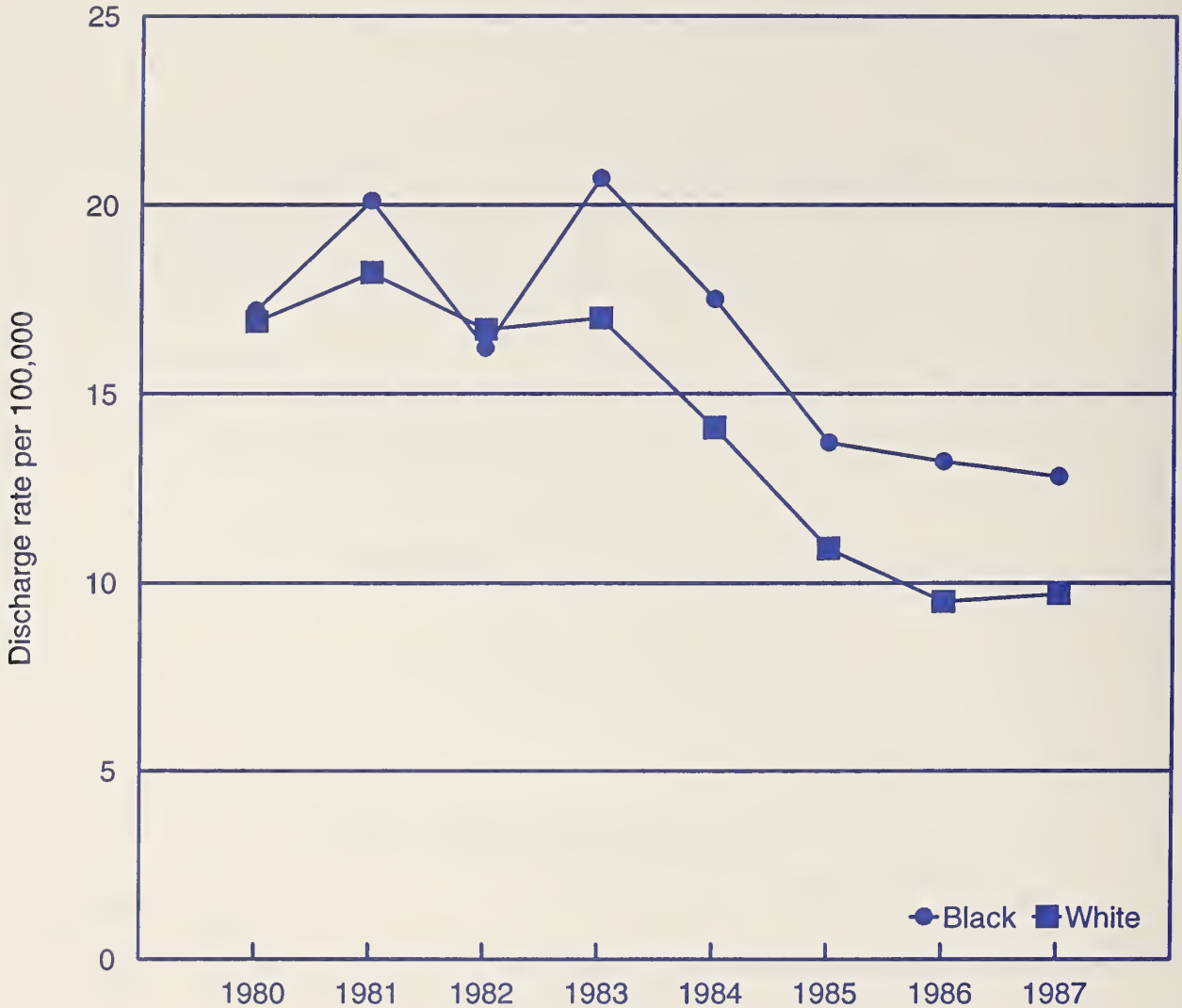
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	33.4 (24.8, 42.1)	22.7 (15.7, 29.6)	29.6 (22.8, 36.3)	26.2 (20.6, 31.9)	26.1 (19.6, 32.6)	29.5 (23.2, 35.8)	26.2 (18.4, 34.0)	27.0 (17.4, 36.6)	-0.9 (-4.5, 2.8)
White	29.6 (26.1, 33.1)	28.8 (26.2, 31.5)	30.5 (27.9, 33.1)	27.8 (25.4, 30.3)	26.3 (23.6, 29.0)	27.7 (24.1, 31.4)	27.1 (23.5, 30.8)	25.8 (22.0, 29.7)	-1.9 (-2.9, -0.8)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

10. Cancer of head and neck



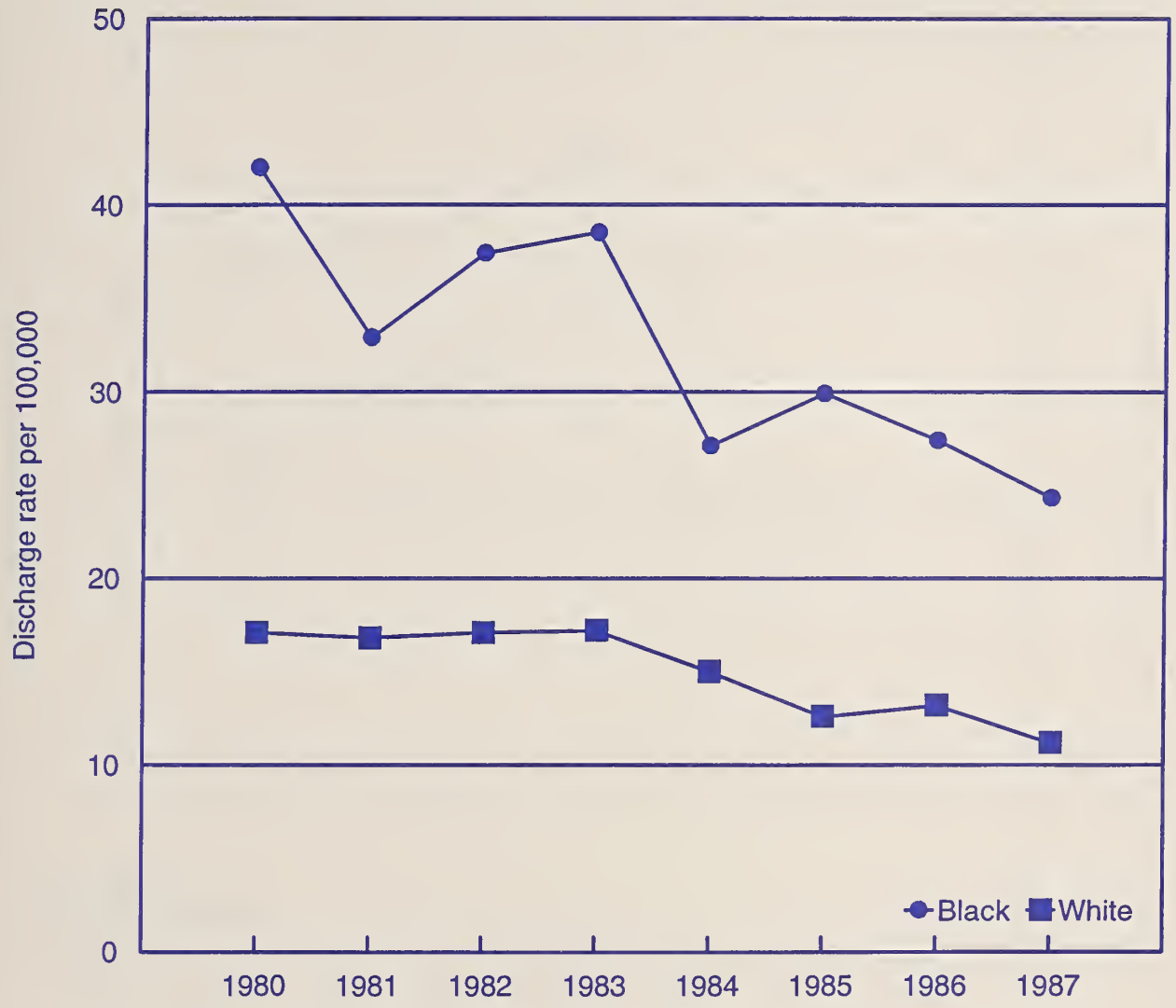
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	17.2 (11.7, 22.7)	20.1 (15.4, 24.8)	16.2 (9.4, 23.0)	20.7 (13.6, 27.8)	17.5 (11.9, 23.1)	13.7 (9.2, 18.3)	13.2 (9.0, 17.3)	12.8 (7.6, 18.0)	-5.6 (-9.2, -1.7)
White	16.9 (14.9, 18.8)	18.2 (15.9, 20.5)	16.7 (14.7, 18.7)	17.0 (14.8, 19.1)	14.1 (12.3, 15.8)	10.9 (9.4, 12.4)	9.5 (8.0, 11.0)	9.7 (8.0, 11.4)	-9.7 (-12.7, -6.6)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

11. Cancer of stomach and esophagus



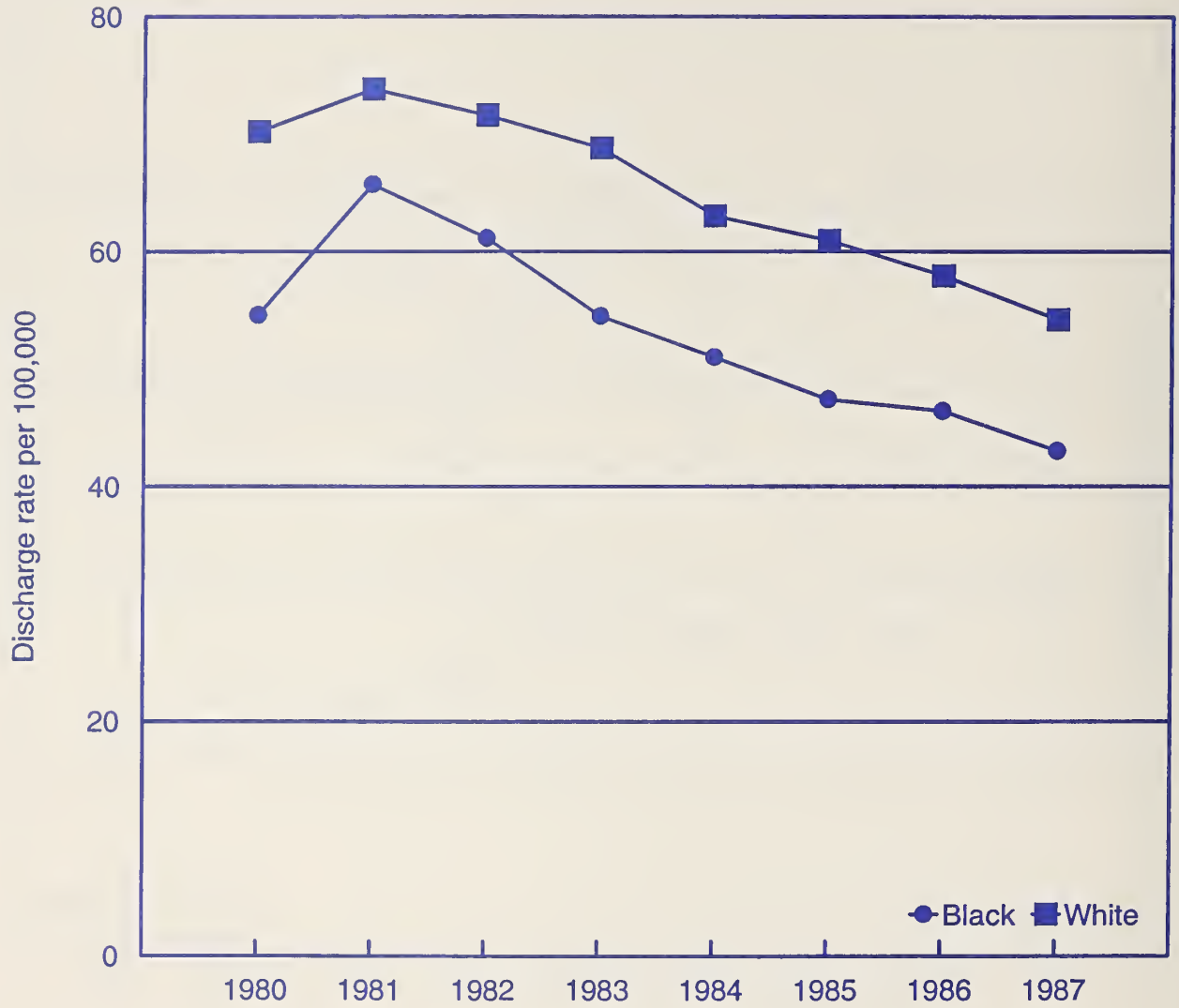
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	42.0 (33.4, 50.6)	32.9 (24.7, 41.1)	37.4 (27.6, 47.1)	38.5 (29.7, 47.4)	27.1 (19.6, 34.7)	29.9 (23.4, 36.4)	27.4 (19.4, 35.3)	24.3 (17.3, 31.2)	-6.6 (-9.6, -3.6)
White	17.1 (15.3, 18.9)	16.8 (15.1, 18.4)	17.1 (15.5, 18.7)	17.2 (15.5, 18.8)	15.0 (13.5, 16.6)	12.6 (11.2, 14.1)	13.2 (11.7, 14.6)	11.2 (9.9, 12.6)	-6.0 (-8.1, -3.8)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

12. Cancer of colon-rectum



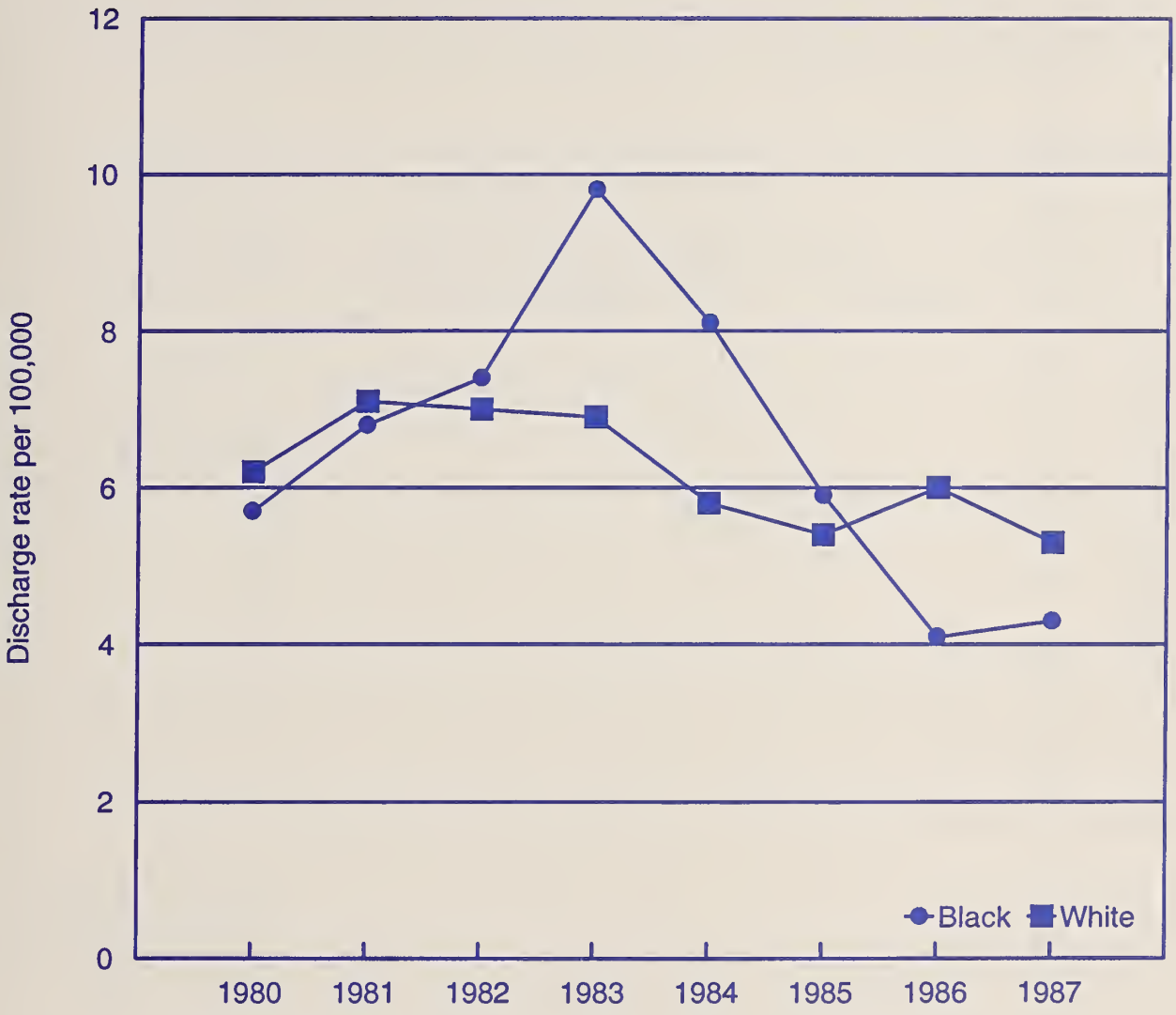
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	54.6 (44.4, 64.9)	65.7 (52.2, 79.1)	61.1 (49.8, 72.4)	54.5 (43.0, 66.0)	51.0 (41.1, 60.9)	47.4 (39.0, 55.8)	46.4 (37.7, 55.2)	43.0 (34.0, 52.0)	–4.9 (–7.1, –2.7)
White	70.2 (65.0, 75.3)	73.8 (68.5, 79.1)	71.6 (66.8, 76.4)	68.8 (64.6, 73.0)	63.0 (59.1, 66.9)	60.9 (56.9, 65.0)	57.9 (53.9, 61.9)	54.2 (50.0, 58.5)	–4.2 (–5.3, –3.1)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

13. Hepatobiliary cancer



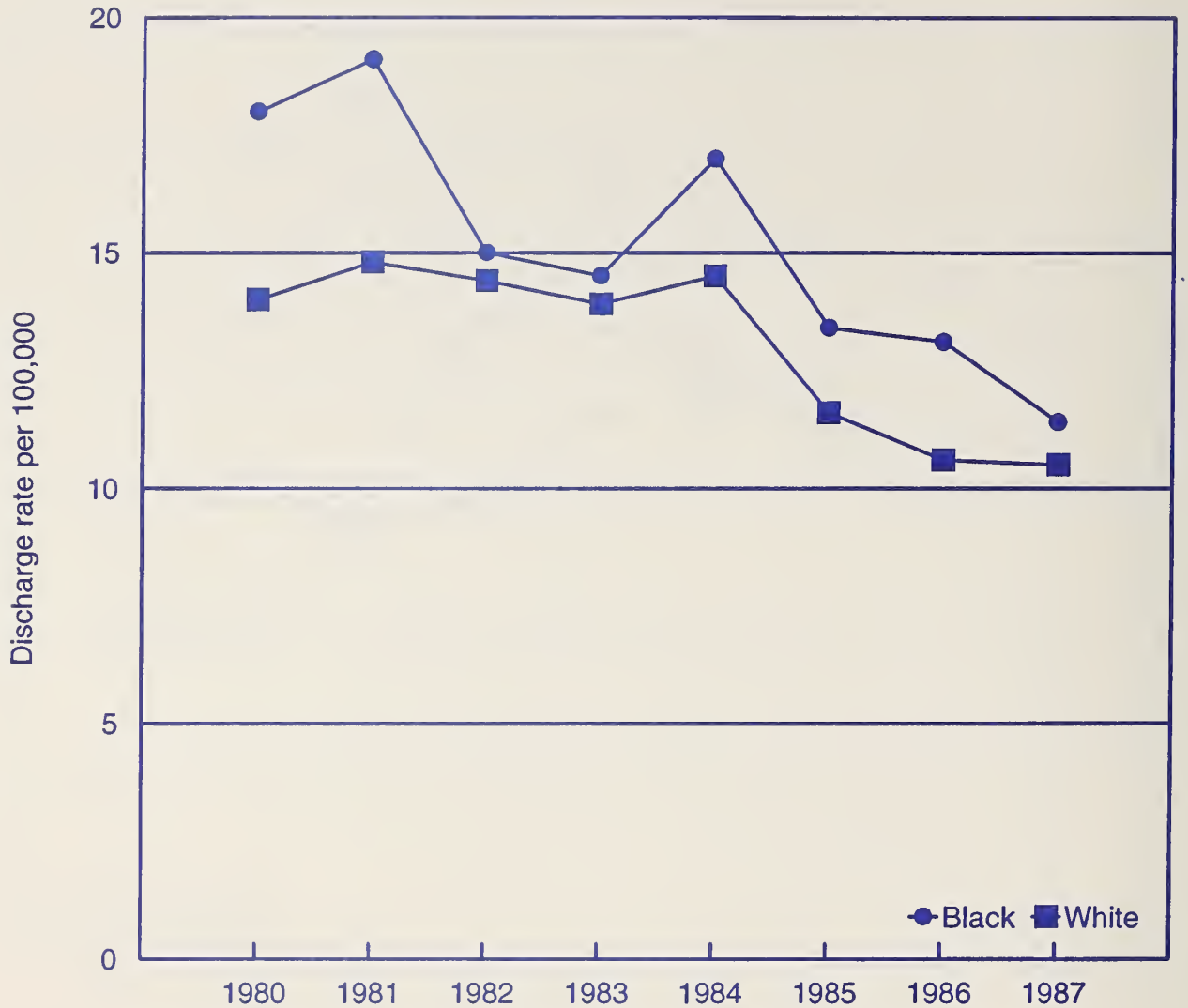
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	5.7 (3.3, 8.0)	6.8 (4.1, 9.5)	7.4 (4.9, 9.9)	9.8 (6.8, 12.9)	8.1 (5.3, 10.8)	5.9 (3.4, 8.3)	4.1 (2.1, 6.1)	4.3 (2.1, 6.5)	-6.1 (-13.7, 2.1)
White	6.2 (5.4, 7.1)	7.1 (6.2, 8.1)	7.0 (6.1, 7.8)	6.9 (6.0, 7.9)	5.8 (4.9, 6.6)	5.4 (4.6, 6.2)	6.0 (5.1, 6.9)	5.3 (4.5, 6.1)	-3.5 (-5.9, -0.9)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

14. Cancer of pancreas



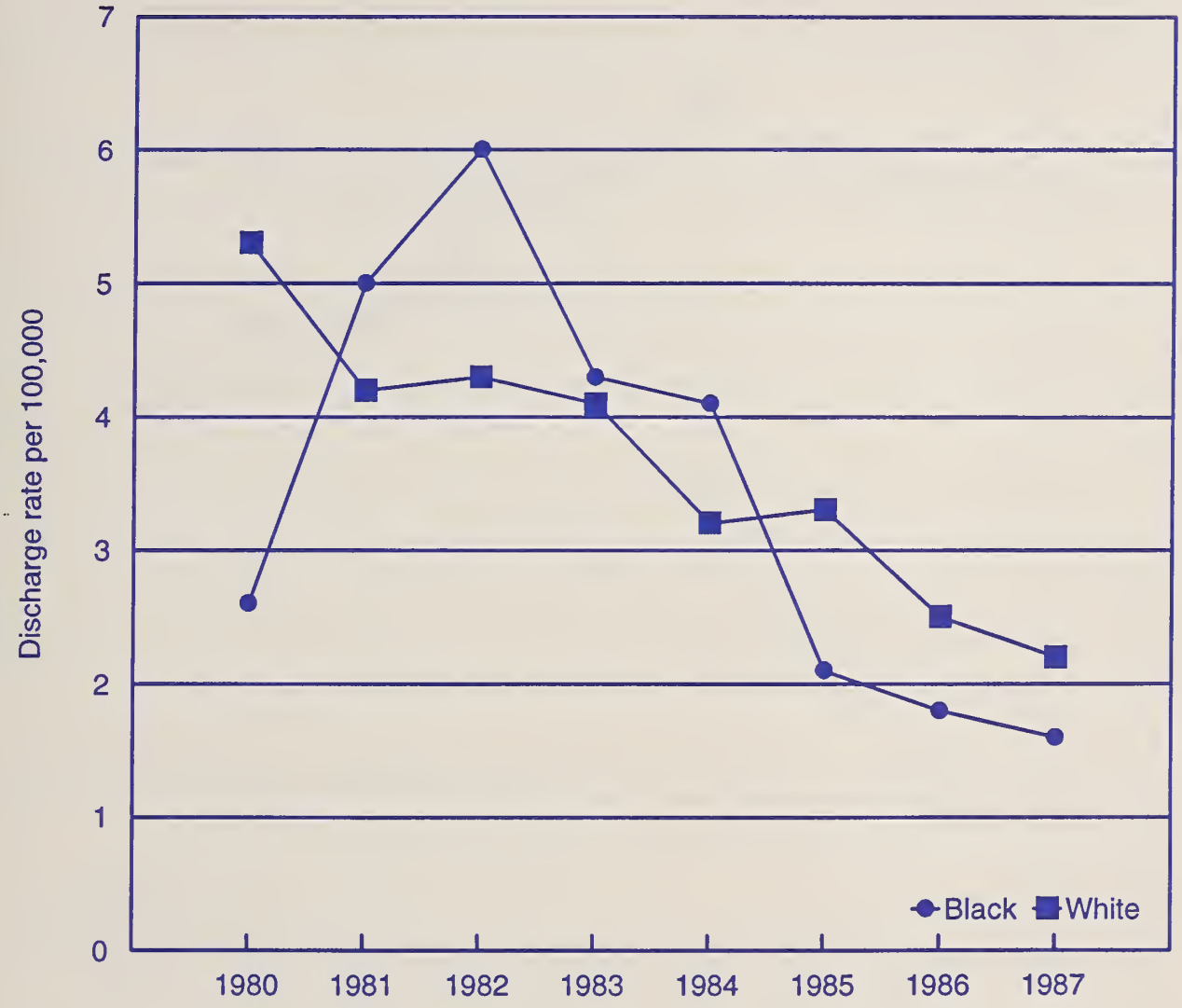
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	18.0 (11.2, 24.7)	19.1 (13.9, 24.3)	15.0 (11.0, 19.0)	14.5 (10.6, 18.4)	17.0 (12.6, 21.3)	13.4 (9.4, 17.5)	13.1 (8.1, 18.1)	11.4 (8.0, 14.9)	-6.0 (-8.5, -3.4)
White	14.0 (12.2, 15.7)	14.8 (13.3, 16.2)	14.4 (12.9, 15.9)	13.9 (12.3, 15.4)	14.5 (13.0, 16.0)	11.6 (10.2, 12.9)	10.6 (9.4, 11.8)	10.5 (9.1, 11.9)	-5.0 (-7.3, -2.6)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

15. Cancer of other gastrointestinal organs, peritoneum



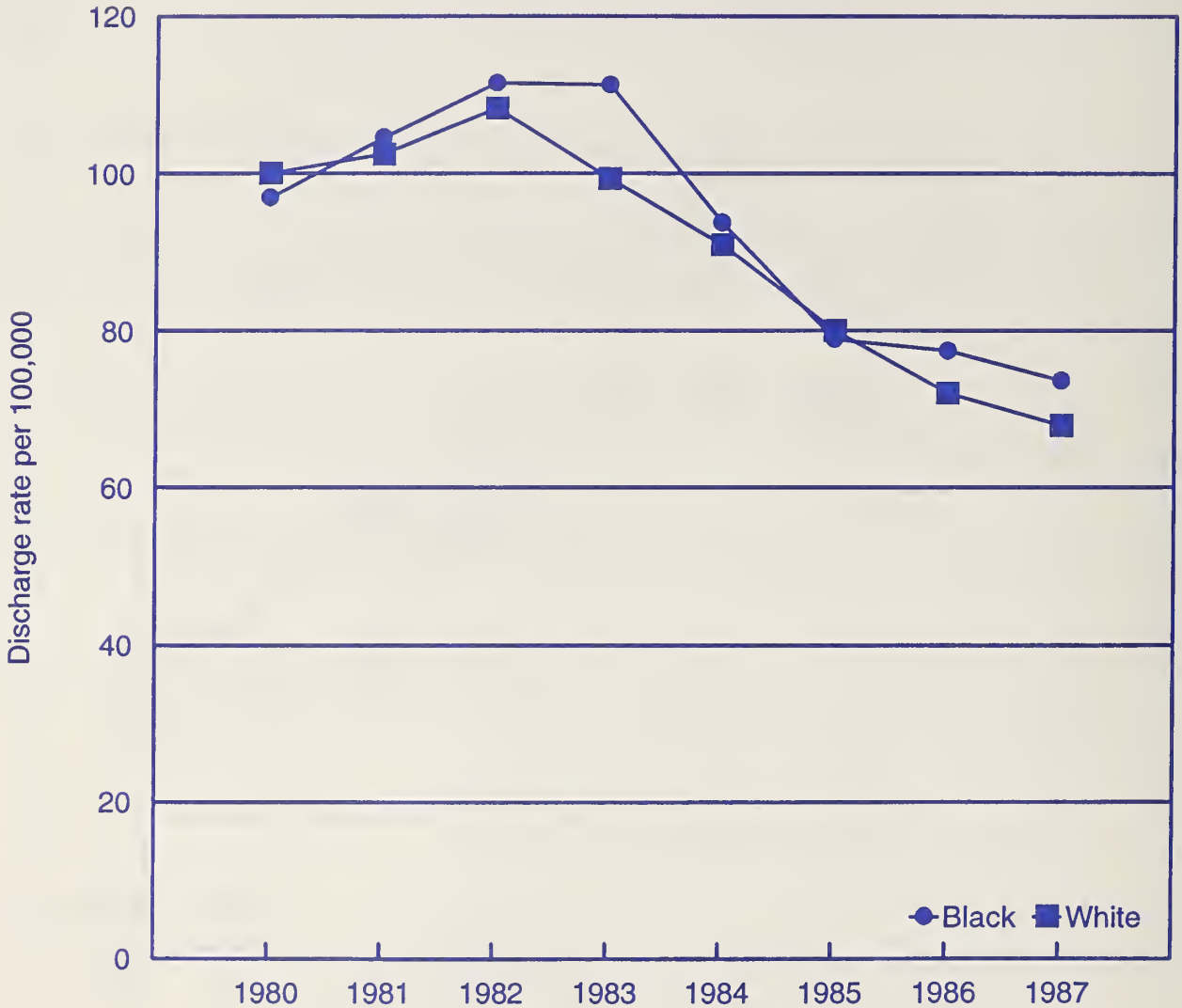
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	2.6 (1.3, 4.0)	5.0 (2.8, 7.1)	6.0 (3.5, 8.6)	4.3 (2.6, 6.1)	4.1 (2.5, 5.7)	2.1 (0.8, 3.3)	1.8 (0.7, 2.9)	1.6 (0.6, 2.5)	–13.3 (–23.2, –2.1)
White	5.3 (4.3, 6.2)	4.2 (3.5, 5.0)	4.3 (3.6, 5.1)	4.1 (3.4, 4.9)	3.2 (2.6, 3.8)	3.3 (2.8, 3.8)	2.5 (2.1, 3.0)	2.2 (1.7, 2.7)	–11.0 (–13.3, –8.7)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

16. Cancer of bronchus, lung, trachea, larynx



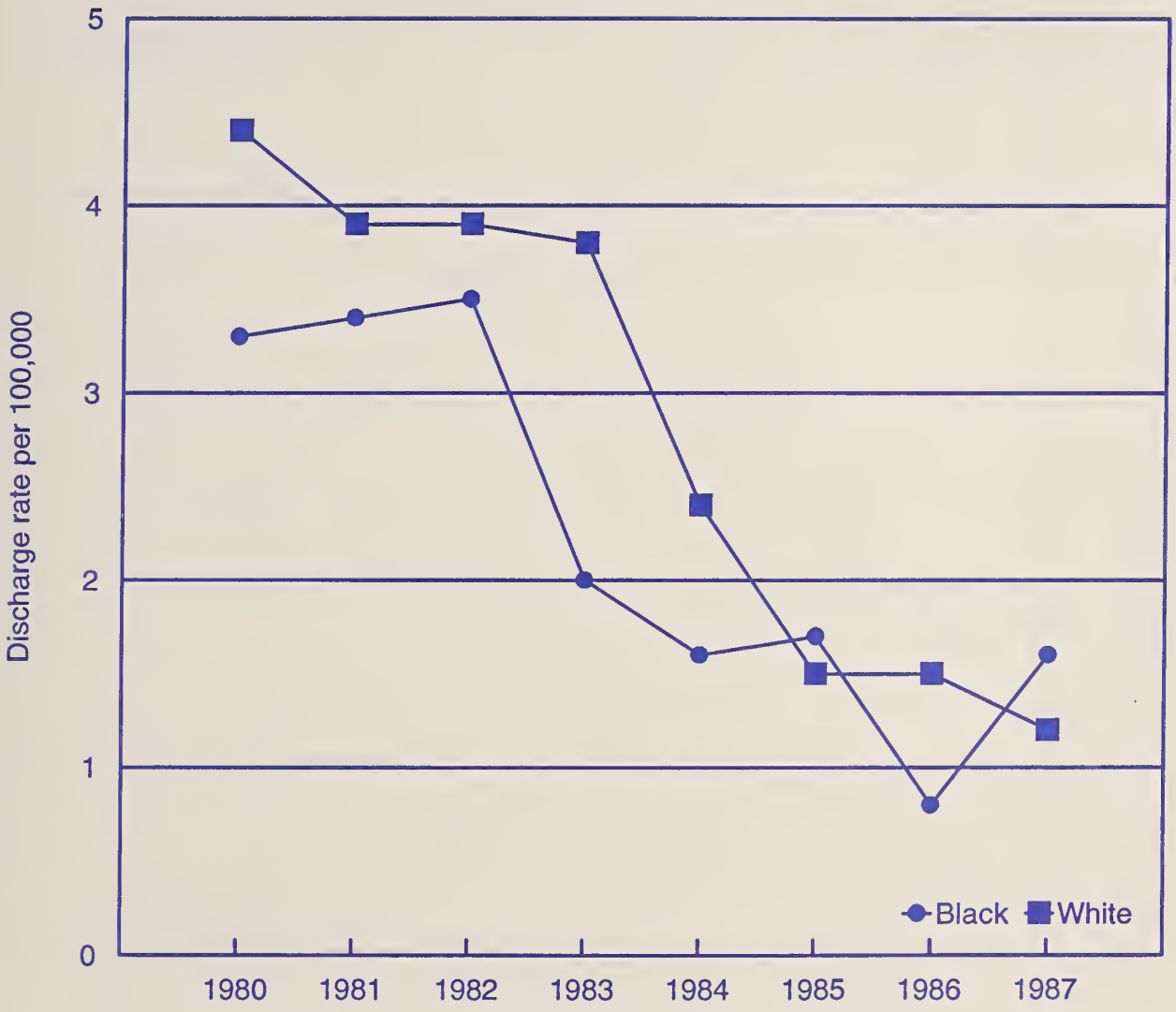
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	96.9 (77.1, 116.7)	104.5 (83.3, 125.8)	111.4 (88.0, 134.9)	111.2 (90.3, 132.1)	93.7 (76.8, 110.5)	78.9 (63.6, 94.3)	77.4 (60.4, 94.5)	73.6 (55.3, 91.9)	–5.4 (–8.3, –2.3)
White	100.0 (92.0, 108.1)	102.4 (94.6, 110.2)	108.2 (101.5, 114.9)	99.3 (92.4, 106.1)	90.9 (84.1, 97.8)	80.0 (73.2, 86.9)	72.0 (65.8, 78.2)	67.9 (62.0, 73.9)	–6.3 (–8.4, –4.1)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

17. Cancer, other respiratory and intrathoracic



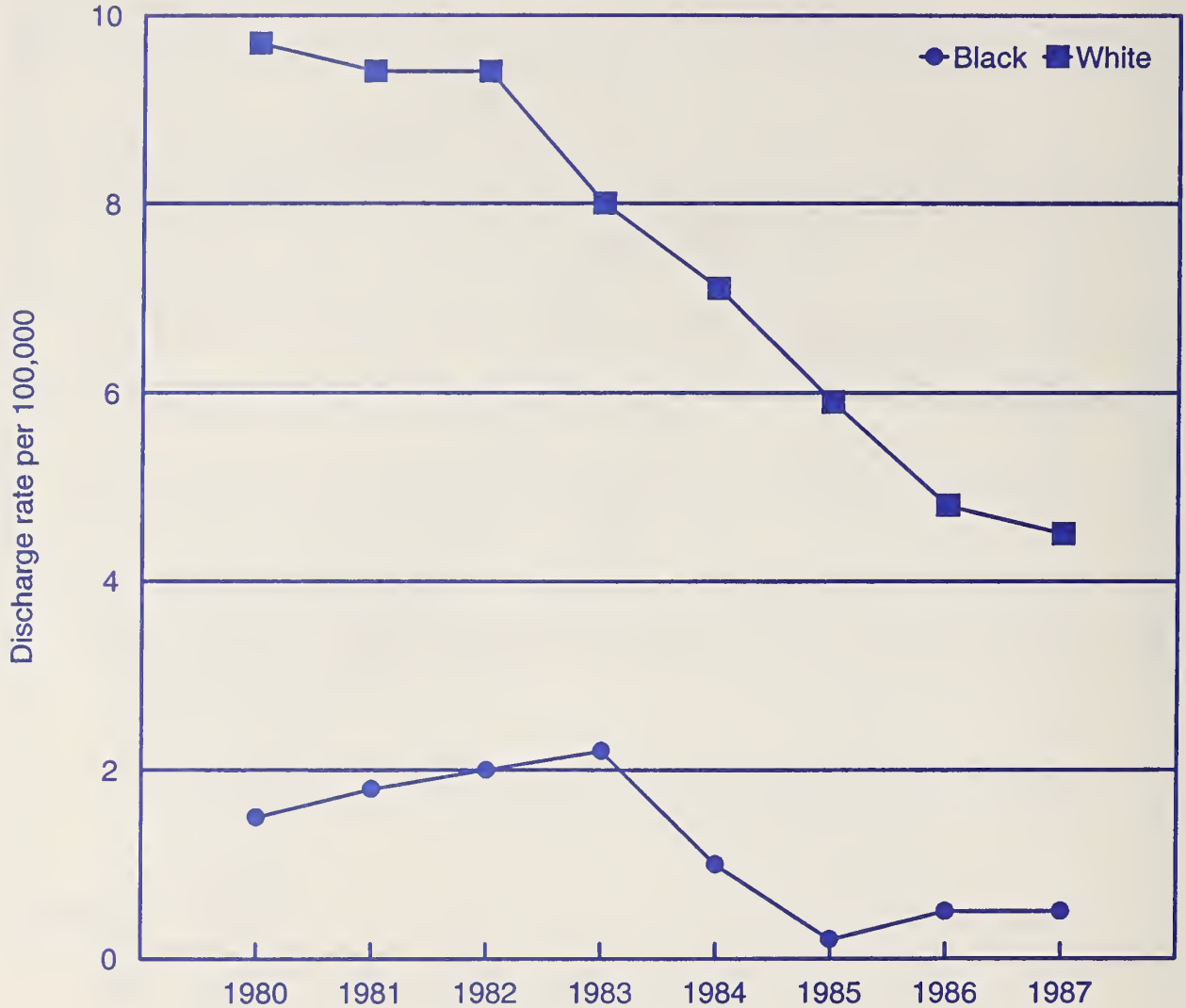
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	3.3 (1.4, 5.2)	3.4 (1.4, 5.4)	3.5 (1.7, 5.3)	2.0 (0.0, 4.1)	1.6 (0.6, 2.6)	1.7 (0.7, 2.6)	0.8 (0.1, 1.5)	1.6 (0.4, 2.9)	-16.1 (-23.6, -7.9)
White	4.4 (3.1, 5.7)	3.9 (2.8, 5.0)	3.9 (2.9, 4.9)	3.8 (2.8, 4.8)	2.4 (1.8, 3.0)	1.5 (1.1, 1.9)	1.5 (1.1, 1.9)	1.2 (0.9, 1.5)	-18.8 (-23.1, -14.2)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

18. Melanoma



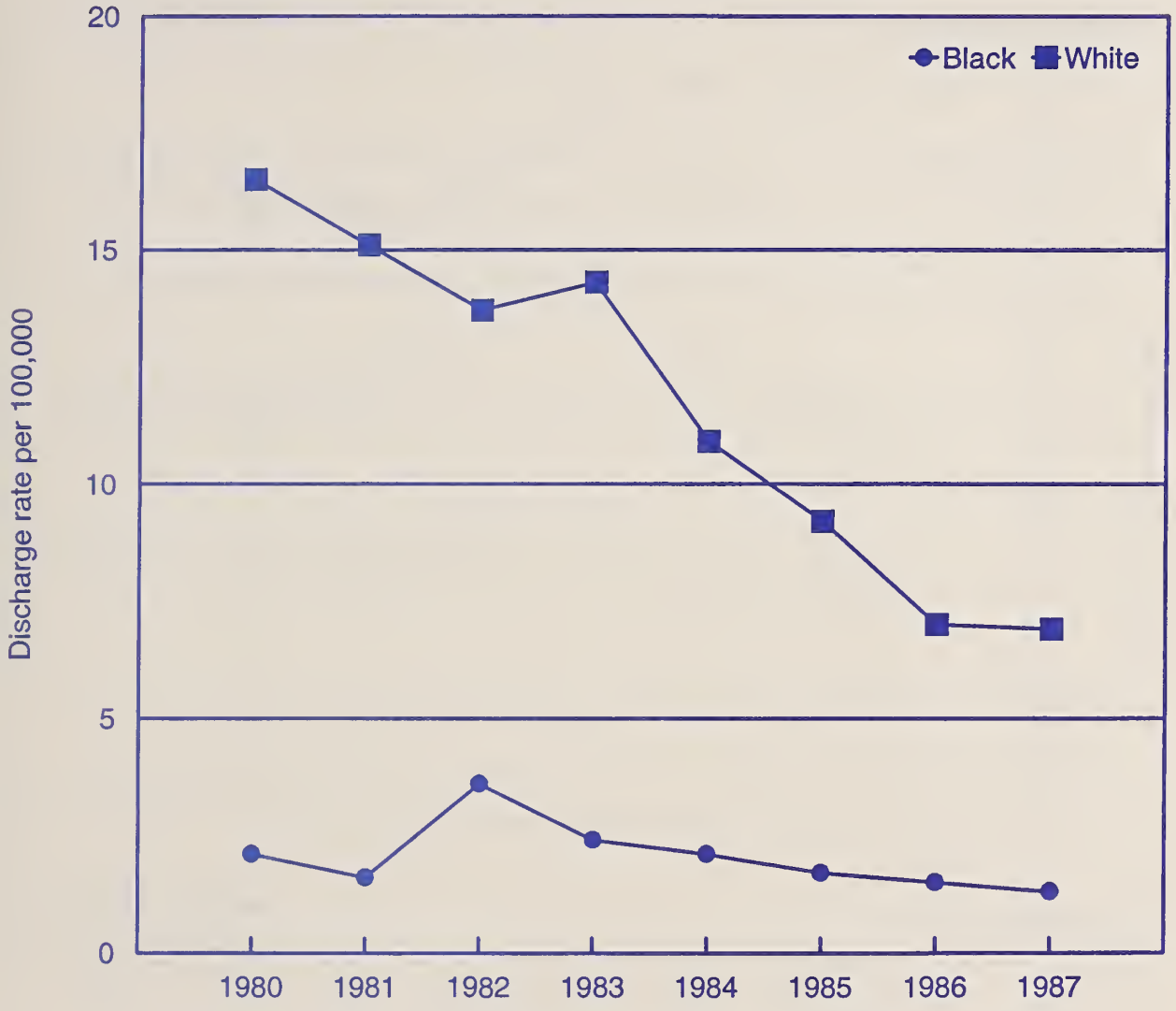
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	1.5 (0.1, 2.9)	1.8 (0.5, 3.2)	2.0 (0.6, 3.4)	2.2 (0.1, 4.3)	1.0 (0.0, 2.0)	0.2 (0.0, 0.6)	0.5 (0.0, 1.2)	0.5 (0.0, 1.1)	-22.0 (-34.3, -7.4)
White	9.7 (8.1, 11.2)	9.4 (8.3, 10.6)	9.4 (8.1, 10.6)	8.0 (6.7, 9.3)	7.1 (6.1, 8.0)	5.9 (4.9, 6.8)	4.8 (4.0, 5.7)	4.5 (3.6, 5.3)	-11.5 (-13.6, -9.4)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

19. Other cancer of skin (not melanoma)



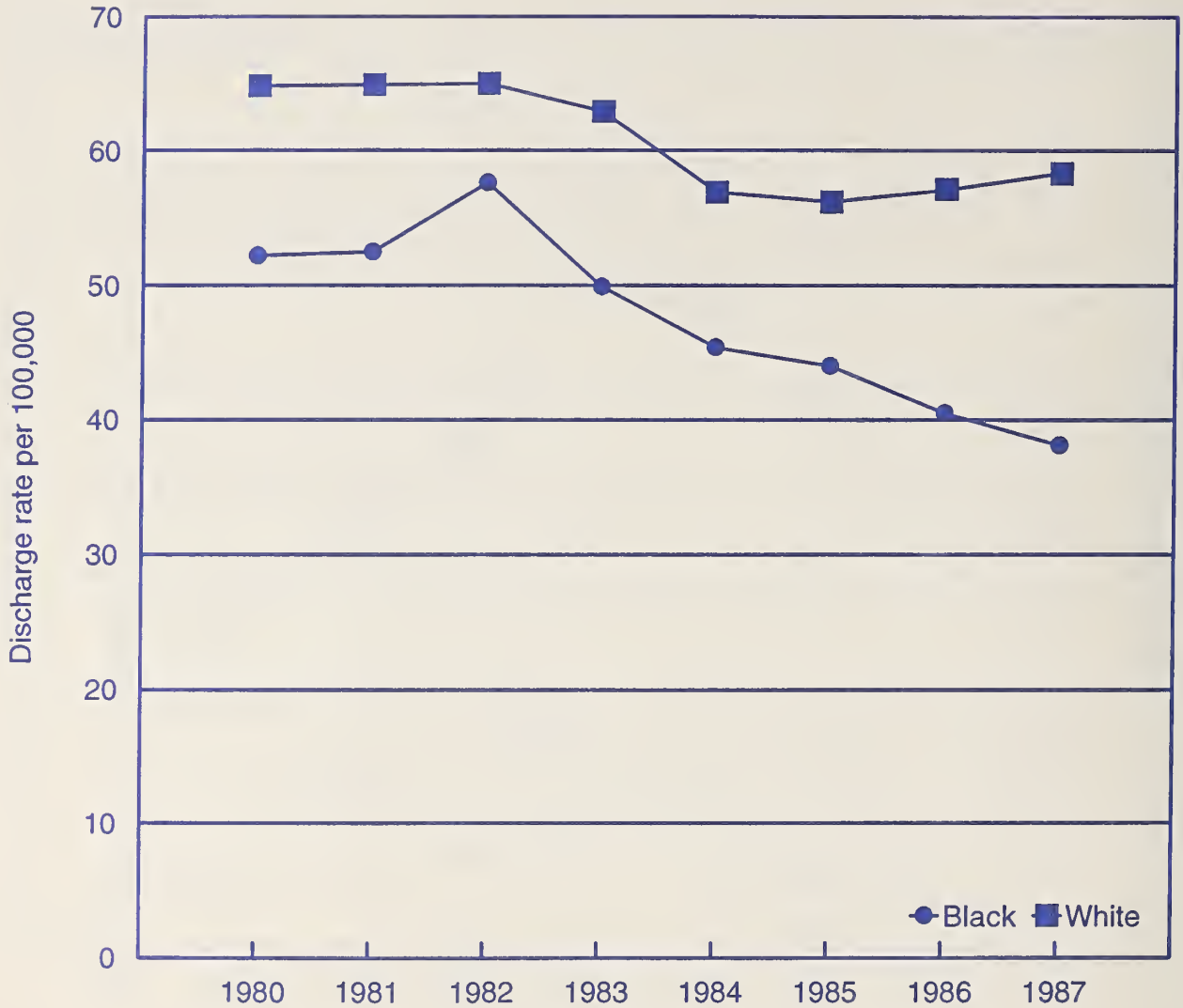
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	2.1 (0.6, 3.6)	1.6 (0.5, 2.8)	3.6 (1.7, 5.5)	2.4 (1.2, 3.6)	2.1 (0.8, 3.3)	1.7 (0.2, 3.2)	1.5 (0.6, 2.4)	1.3 (0.0, 2.5)	-7.2 (-14.8, 1.1)
White	16.5 (14.1, 18.8)	15.1 (13.1, 17.0)	13.7 (12.0, 15.4)	14.3 (11.4, 17.2)	10.9 (9.0, 12.9)	9.2 (6.2, 12.2)	7.0 (4.3, 9.7)	6.9 (4.1, 9.7)	-12.6 (-15.2, -9.9)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

20. Cancer of breast



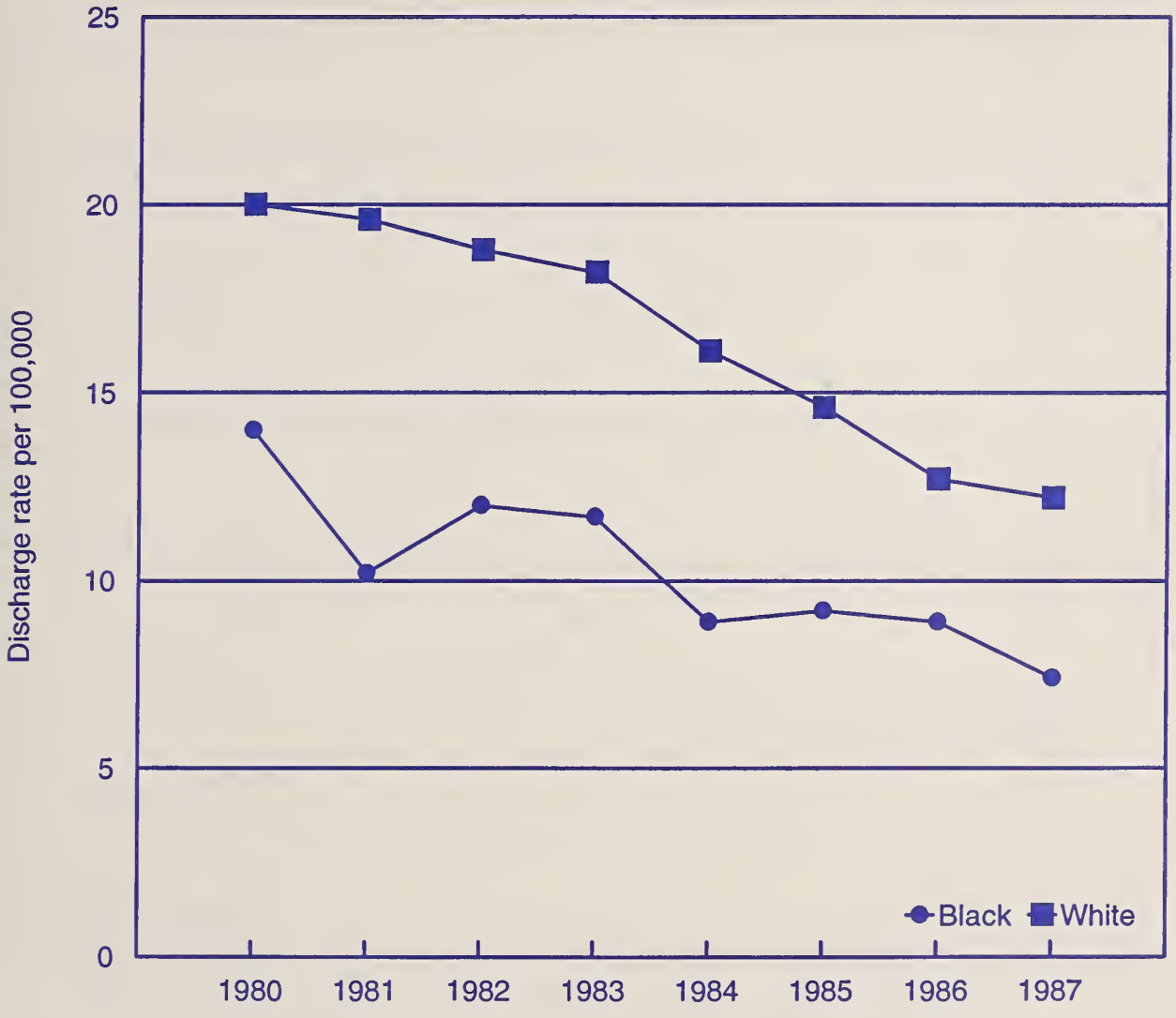
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	52.2 (41.7, 62.7)	52.5 (40.9, 64.2)	57.6 (45.2, 70.0)	49.9 (39.6, 60.1)	45.4 (36.3, 54.6)	44.0 (35.4, 52.6)	40.5 (30.9, 50.1)	38.1 (29.2, 47.0)	-5.1 (-6.9, -3.3)
White	64.8 (59.0, 70.5)	64.9 (59.7, 70.1)	65.0 (60.0, 69.9)	62.9 (58.7, 67.2)	56.9 (53.0, 60.9)	56.2 (51.9, 60.4)	57.1 (52.5, 61.8)	58.3 (54.3, 62.4)	-2.2 (-3.3, -1.1)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

21. Cancer of uterus



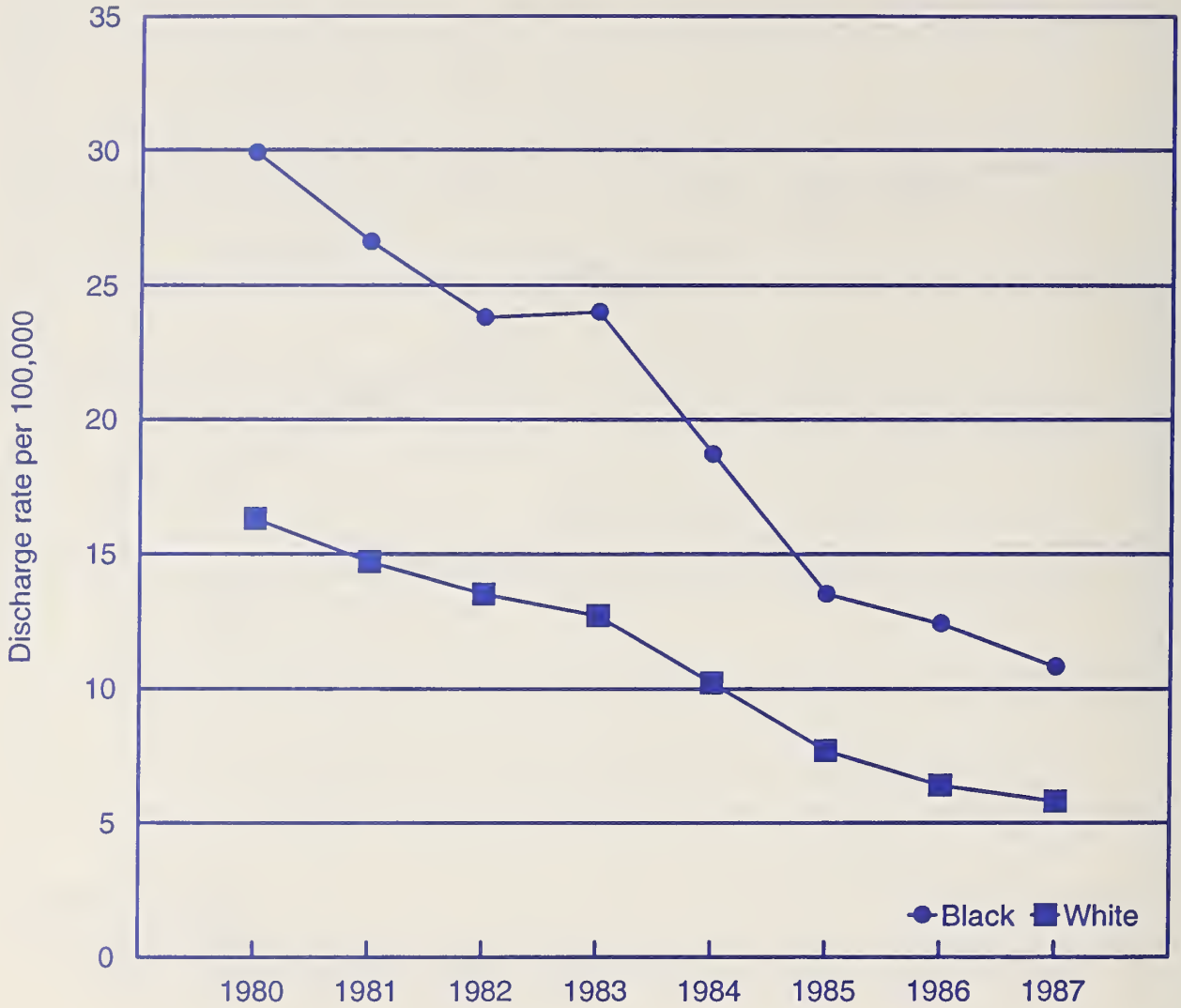
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	14.0 (9.8, 18.2)	10.2 (6.8, 13.5)	12.0 (8.3, 15.7)	11.7 (7.3, 16.1)	8.9 (5.9, 12.0)	9.2 (6.2, 12.2)	8.9 (5.0, 12.7)	7.4 (4.6, 10.3)	-7.1 (-10.0, -4.2)
White	20.0 (17.6, 22.4)	19.6 (17.4, 21.8)	18.8 (17.0, 20.6)	18.2 (16.4, 20.0)	16.1 (14.2, 18.0)	14.6 (13.1, 16.0)	12.7 (11.3, 14.0)	12.2 (10.8, 13.6)	-7.5 (-8.9, -6.1)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

22. Cancer of cervix



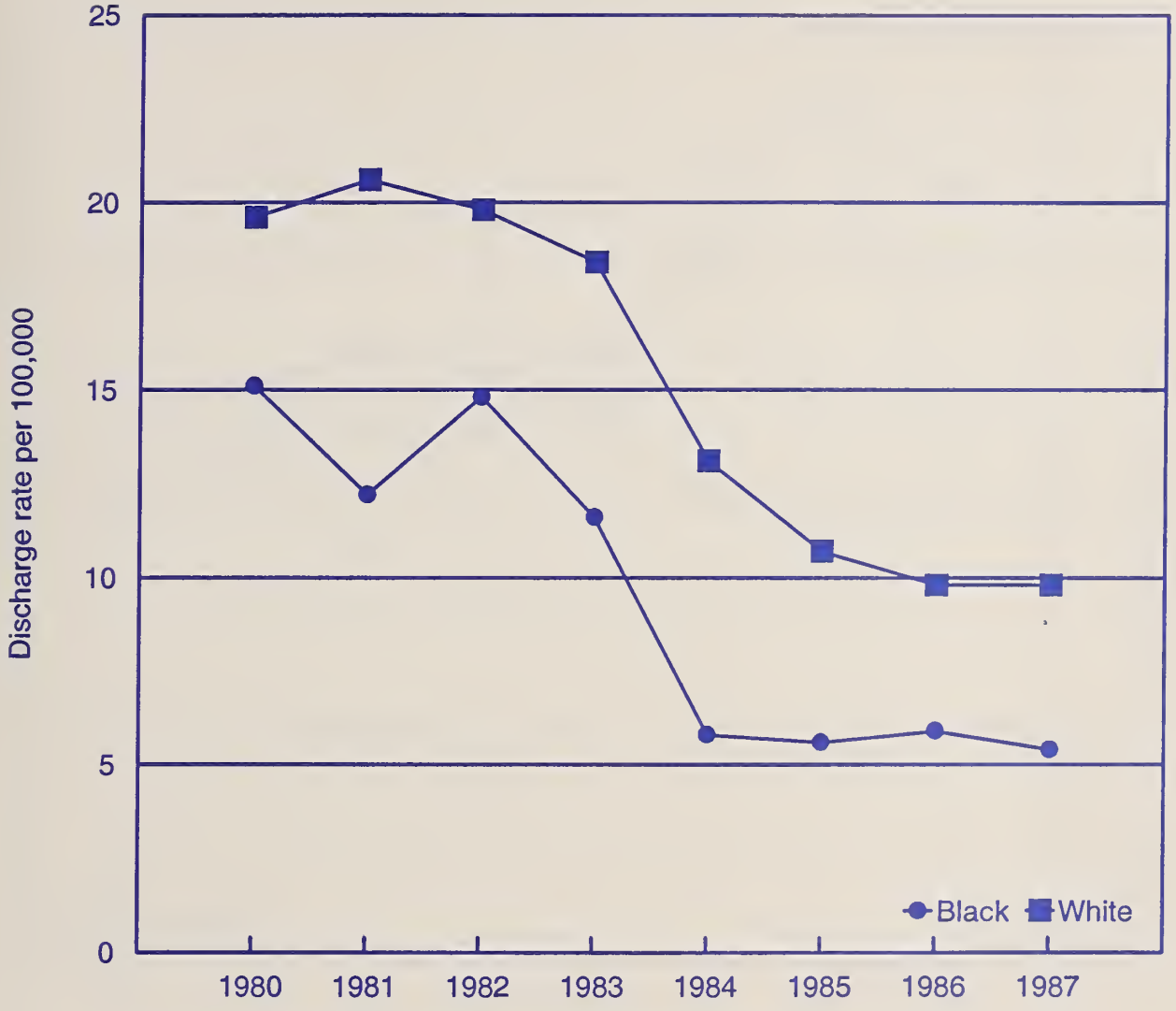
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	29.9 (21.4, 38.4)	26.6 (19.9, 33.3)	23.8 (16.5, 31.2)	24.0 (16.5, 31.5)	18.7 (13.7, 23.7)	13.5 (9.2, 17.9)	12.4 (7.3, 17.4)	10.8 (6.7, 14.9)	-14.2 (-16.6, -11.8)
White	16.3 (13.7, 18.9)	14.7 (12.2, 17.1)	13.5 (11.5, 15.5)	12.7 (10.5, 15.0)	10.2 (7.7, 12.6)	7.7 (6.3, 9.0)	6.4 (5.4, 7.4)	5.8 (4.8, 6.8)	-14.7 (-16.9, -12.5)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

23. Cancer of ovary



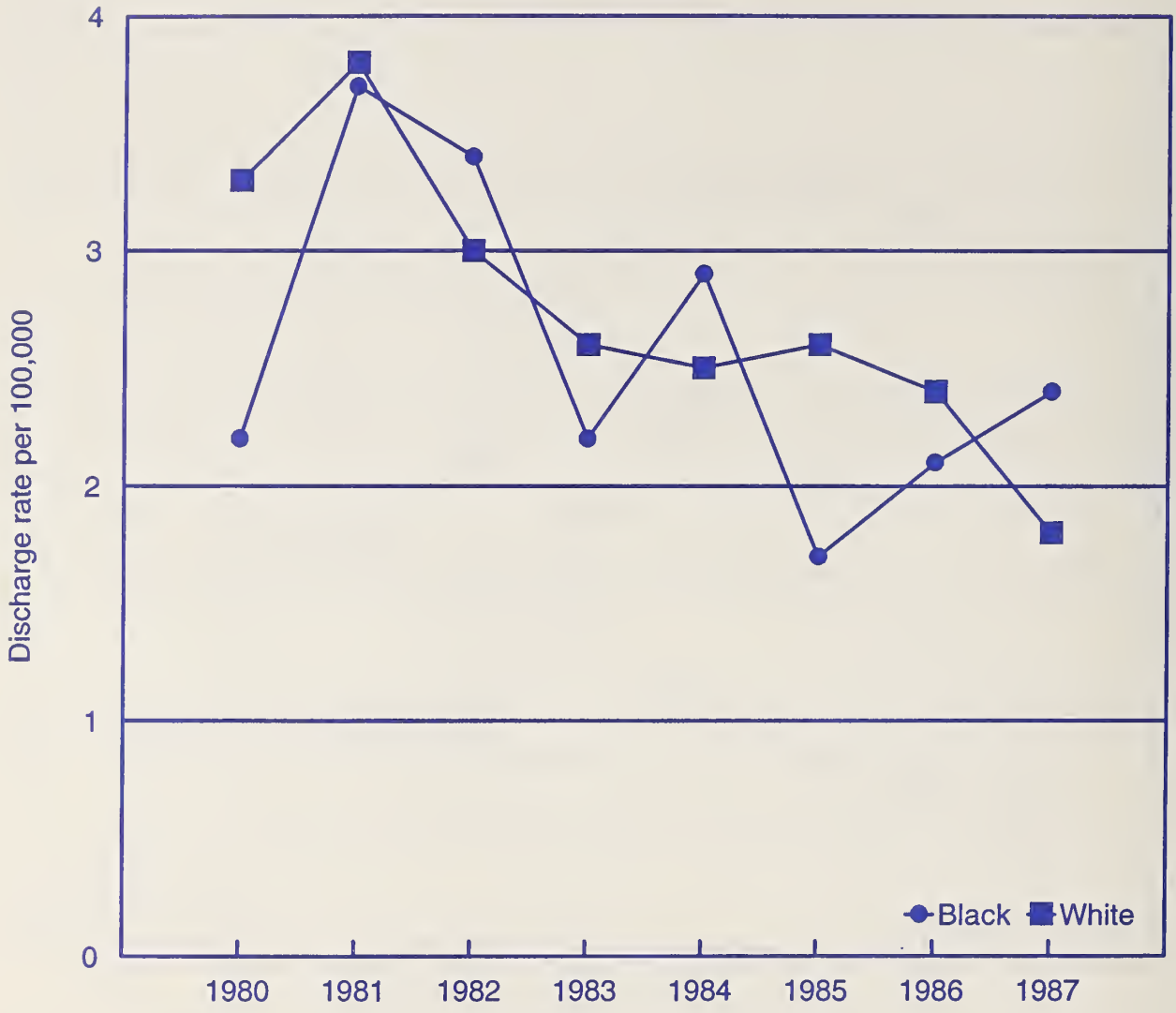
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	15.1 (9.5, 20.8)	12.2 (7.0, 17.4)	14.8 (10.3, 19.3)	11.6 (7.9, 15.3)	5.8 (3.8, 7.9)	5.6 (3.7, 7.5)	5.9 (3.5, 8.3)	5.4 (3.4, 7.3)	–15.8 (–21.1, –10.2)
White	19.6 (16.4, 22.8)	20.6 (17.4, 23.8)	19.8 (17.0, 22.5)	18.4 (15.5, 21.3)	13.1 (10.7, 15.5)	10.7 (9.3, 12.1)	9.8 (8.6, 11.0)	9.8 (8.4, 11.1)	–12.0 (–15.2, –8.7)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

24. Cancer of other female genital organs



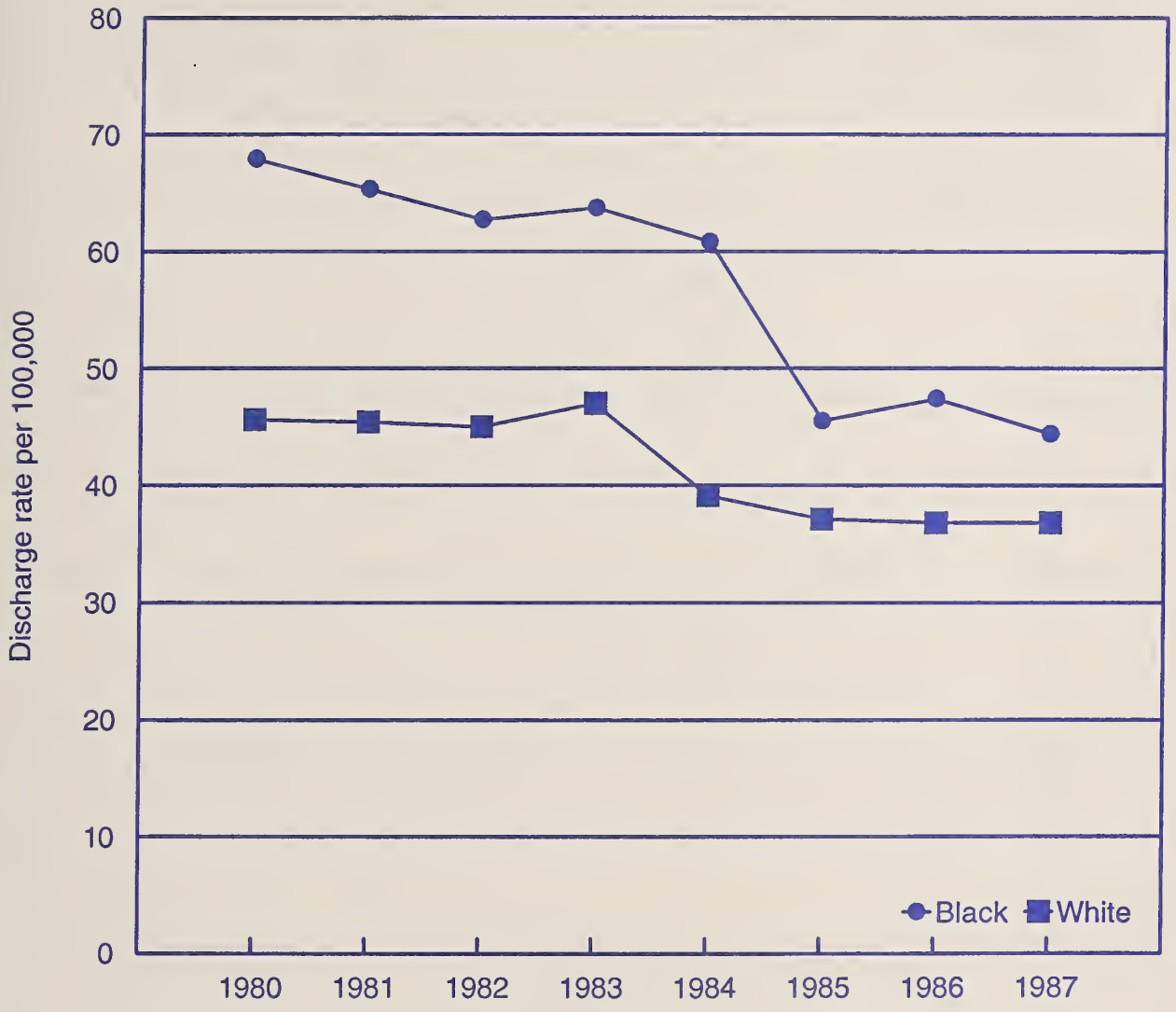
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	2.2 (0.8, 3.7)	3.7 (1.6, 5.7)	3.4 (1.3, 5.6)	2.2 (0.8, 3.5)	2.9 (1.5, 4.3)	1.7 (0.8, 2.5)	2.1 (0.4, 3.9)	2.4 (1.1, 3.7)	–4.8 (–11.9, 3.0)
White	3.3 (2.6, 4.0)	3.8 (3.0, 4.7)	3.0 (2.2, 3.8)	2.6 (1.9, 3.4)	2.5 (2.0, 3.1)	2.6 (2.0, 3.2)	2.4 (1.8, 3.0)	1.8 (1.3, 2.3)	–8.1 (–10.9, –5.2)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

25. Cancer of prostate



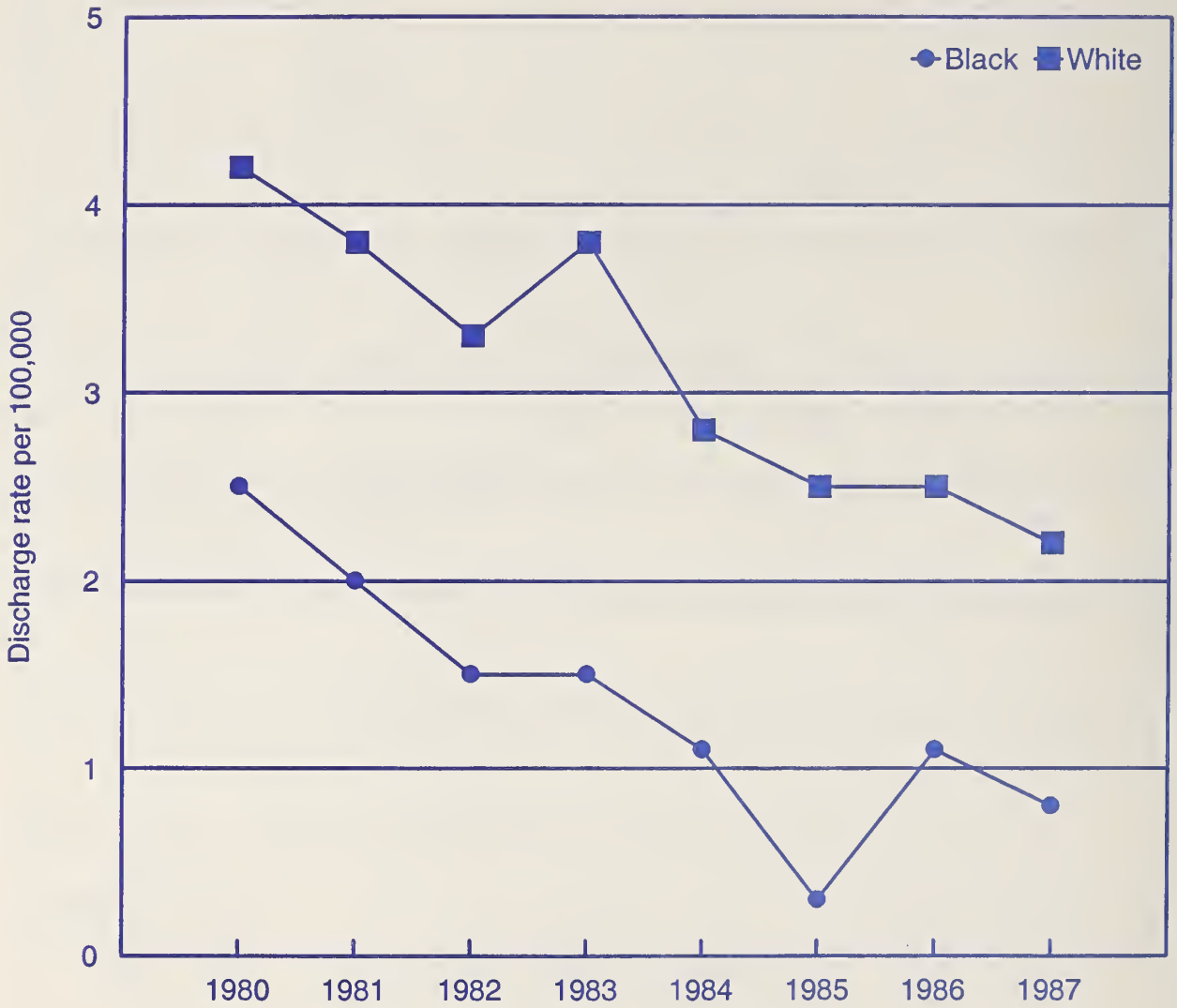
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	67.9 (54.6, 81.1)	65.3 (53.1, 77.6)	62.7 (49.0, 76.4)	63.7 (50.7, 76.8)	60.8 (45.8, 75.9)	45.5 (35.5, 55.5)	47.4 (35.9, 58.9)	44.4 (33.9, 55.0)	-6.4 (-8.6, -4.2)
White	45.6 (41.4, 49.9)	45.4 (41.4, 49.4)	45.0 (41.5, 48.5)	47.0 (43.3, 50.7)	39.1 (35.9, 42.3)	37.1 (33.9, 40.3)	36.8 (33.0, 40.6)	36.8 (33.4, 40.1)	-3.9 (-5.5, -2.3)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

26. Cancer of other male genital organs



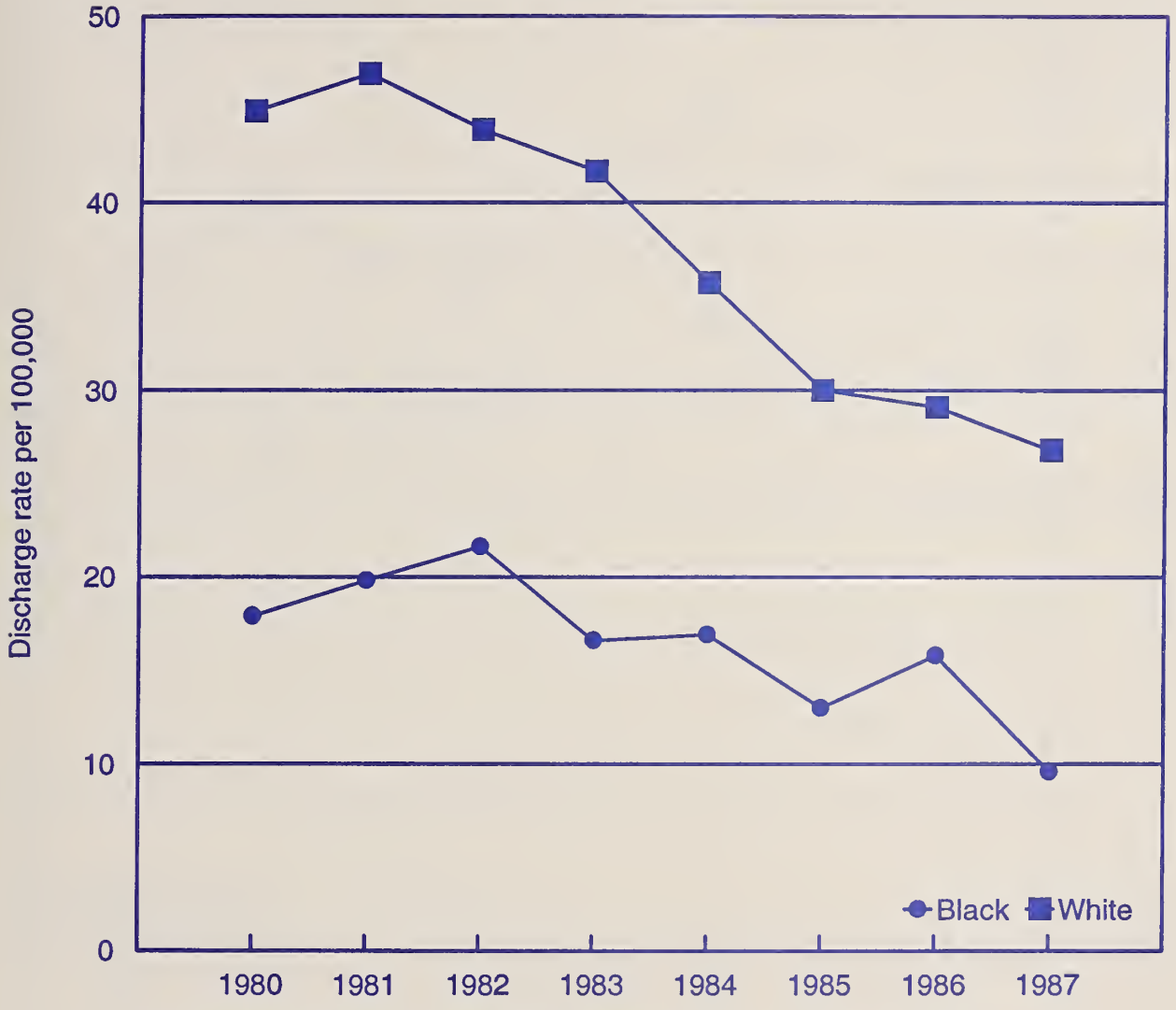
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	2.5 (0.7, 4.3)	2.0 (0.5, 3.5)	1.5 (0.4, 2.6)	1.5 (0.4, 2.6)	1.1 (0.3, 2.0)	0.3 (0.0, 0.7)	1.1 (0.3, 2.0)	0.8 (0.0, 1.5)	-17.3 (-28.0, -5.1)
White	4.2 (3.3, 5.1)	3.8 (3.0, 4.5)	3.3 (2.7, 4.0)	3.8 (3.1, 4.4)	2.8 (2.2, 3.4)	2.5 (2.0, 3.0)	2.5 (2.0, 3.0)	2.2 (1.7, 2.6)	-9.0 (-11.1, -6.8)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

27. Cancer of bladder



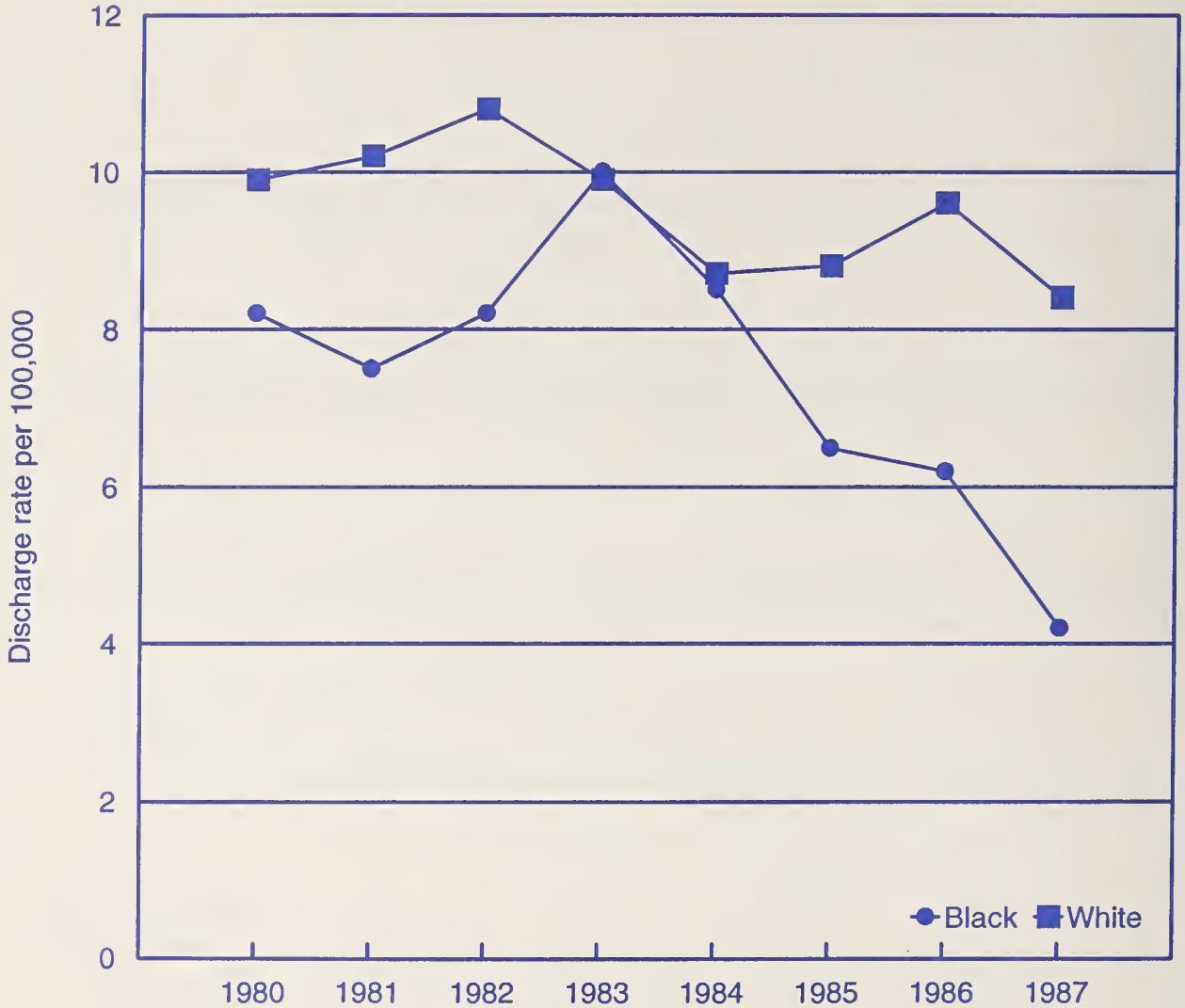
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	17.9 (13.3, 22.5)	19.8 (14.6, 25.0)	21.6 (15.3, 27.9)	16.6 (11.0, 22.1)	16.9 (12.3, 21.5)	13.0 (9.2, 16.8)	15.8 (10.6, 20.9)	9.6 (6.4, 12.9)	-7.9 (-12.4, -3.3)
White	44.9 (40.4, 49.3)	46.9 (42.9, 50.9)	43.9 (39.9, 47.9)	41.7 (38.5, 45.0)	35.7 (32.8, 38.6)	30.0 (27.4, 32.5)	29.1 (26.2, 31.9)	26.8 (24.1, 29.4)	-8.3 (-10.2, -6.5)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

28. Cancer of kidney



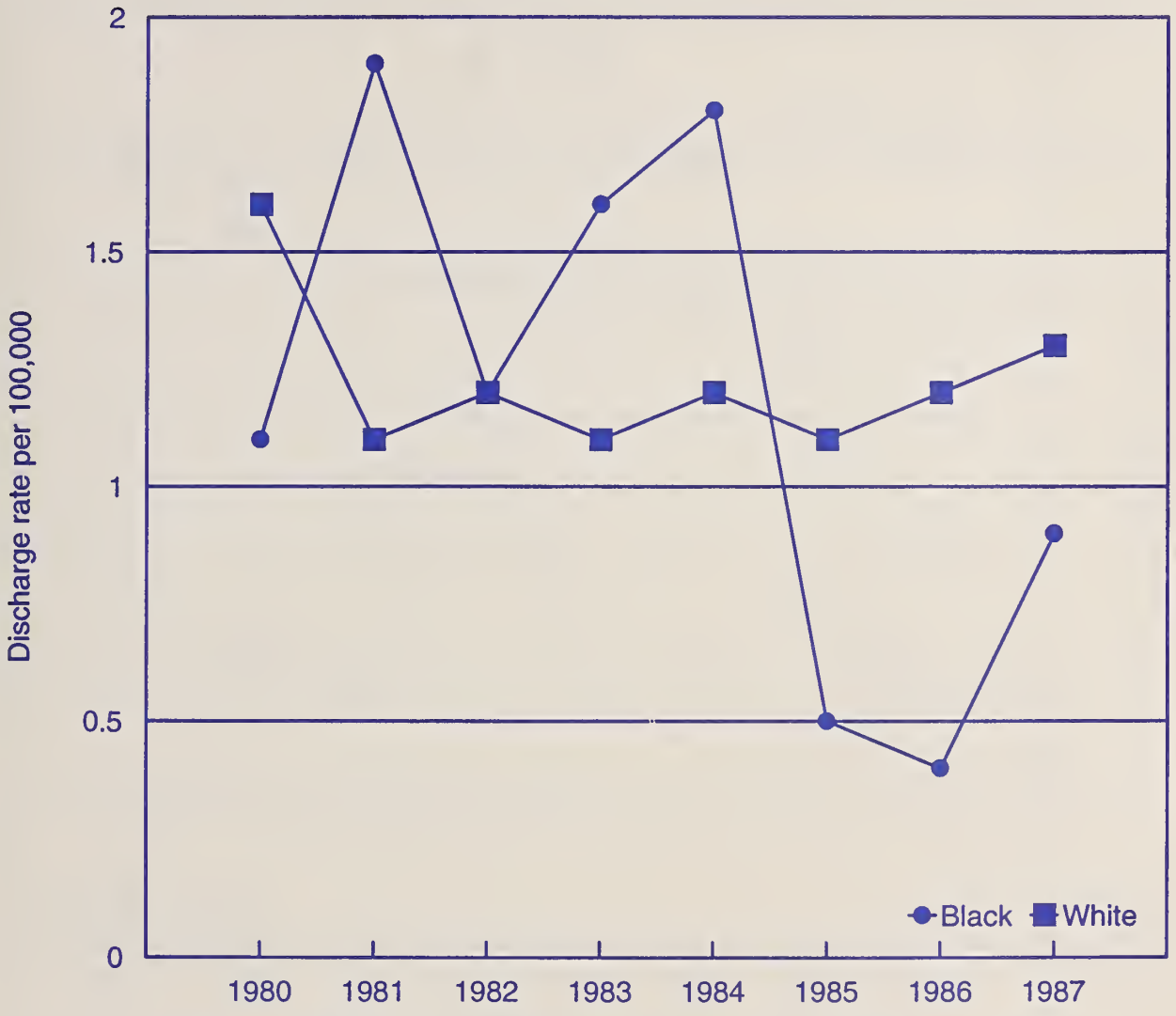
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	8.2 (4.7, 11.8)	7.5 (5.2, 9.9)	8.2 (5.0, 11.3)	10.0 (6.6, 13.3)	8.5 (5.1, 11.9)	6.5 (4.3, 8.8)	6.2 (3.8, 8.6)	4.2 (2.3, 6.1)	-7.5 (-12.9, -1.7)
White	9.9 (8.7, 11.2)	10.2 (9.0, 11.4)	10.8 (9.6, 12.0)	9.9 (8.9, 11.0)	8.7 (7.7, 9.8)	8.8 (7.7, 9.9)	9.6 (8.5, 10.6)	8.4 (7.2, 9.5)	-2.6 (-4.5, -0.8)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

29. Cancer of other urinary organs



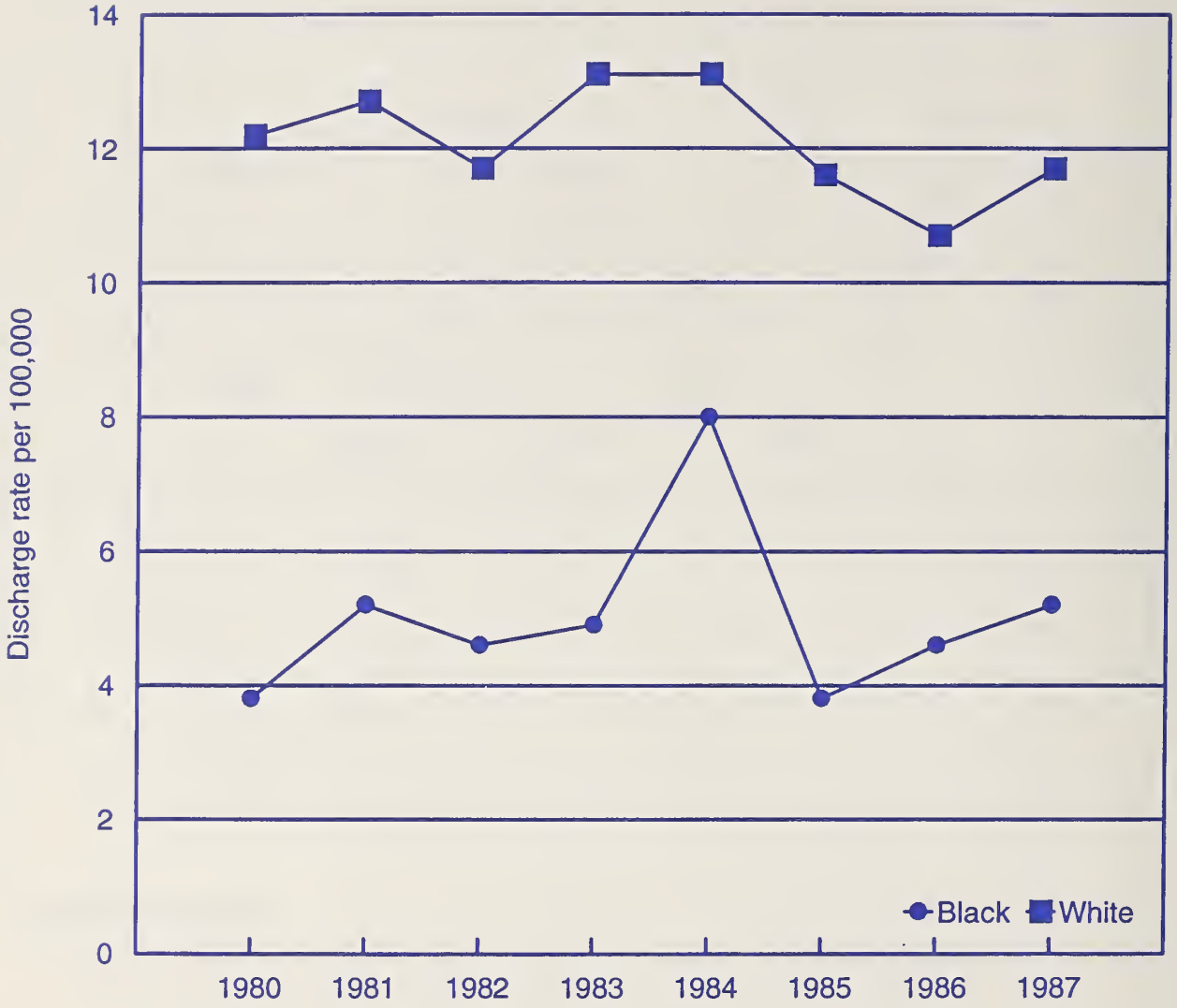
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	1.1 (0.4, 1.8)	1.9 (0.3, 3.5)	1.2 (0.0, 2.6)	1.6 (0.7, 2.6)	1.8 (0.5, 3.1)	0.5 (0.0, 1.2)	0.4 (0.0, 0.9)	0.9 (0.1, 1.6)	–13.0 (–24.7, 0.6)
White	1.6 (1.2, 2.0)	1.1 (0.8, 1.4)	1.2 (0.9, 1.6)	1.1 (0.8, 1.4)	1.2 (0.9, 1.6)	1.1 (0.8, 1.3)	1.2 (0.8, 1.5)	1.3 (1.0, 1.7)	–1.6 (–5.7, 2.7)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

30. Cancer of brain and nervous system



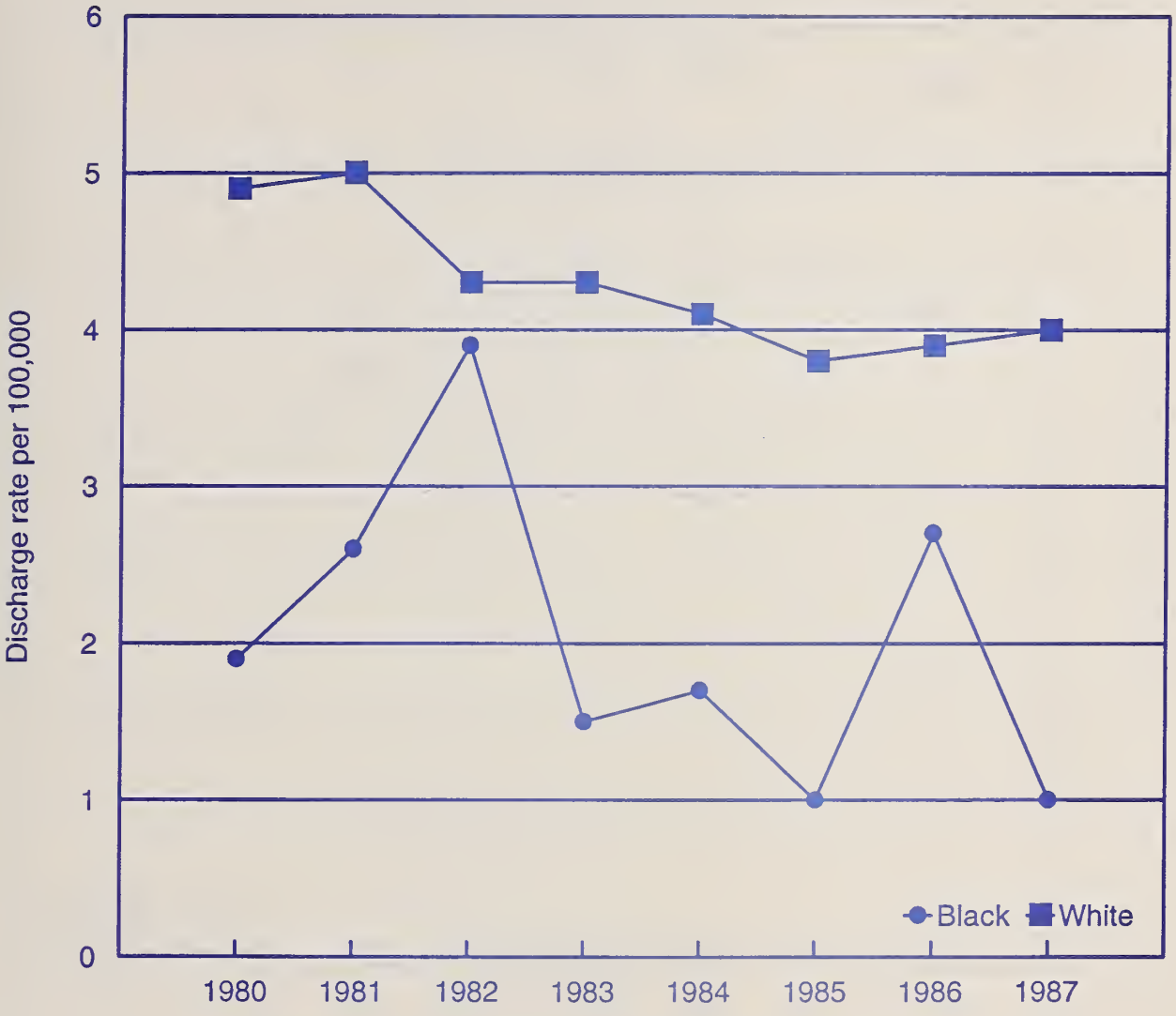
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	3.8 (1.9, 5.7)	5.2 (3.1, 7.2)	4.6 (2.7, 6.6)	4.9 (2.9, 6.9)	8.0 (4.8, 11.3)	3.8 (2.2, 5.3)	4.6 (1.9, 7.2)	5.2 (2.4, 8.0)	1.7 (–5.8, 9.7)
White	12.2 (9.9, 14.6)	12.7 (10.1, 15.3)	11.7 (9.7, 13.7)	13.1 (11.1, 15.0)	13.1 (10.9, 15.3)	11.6 (9.4, 13.8)	10.7 (8.7, 12.7)	11.7 (9.6, 13.7)	–1.4 (–3.4, 0.5)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

31. Cancer of thyroid



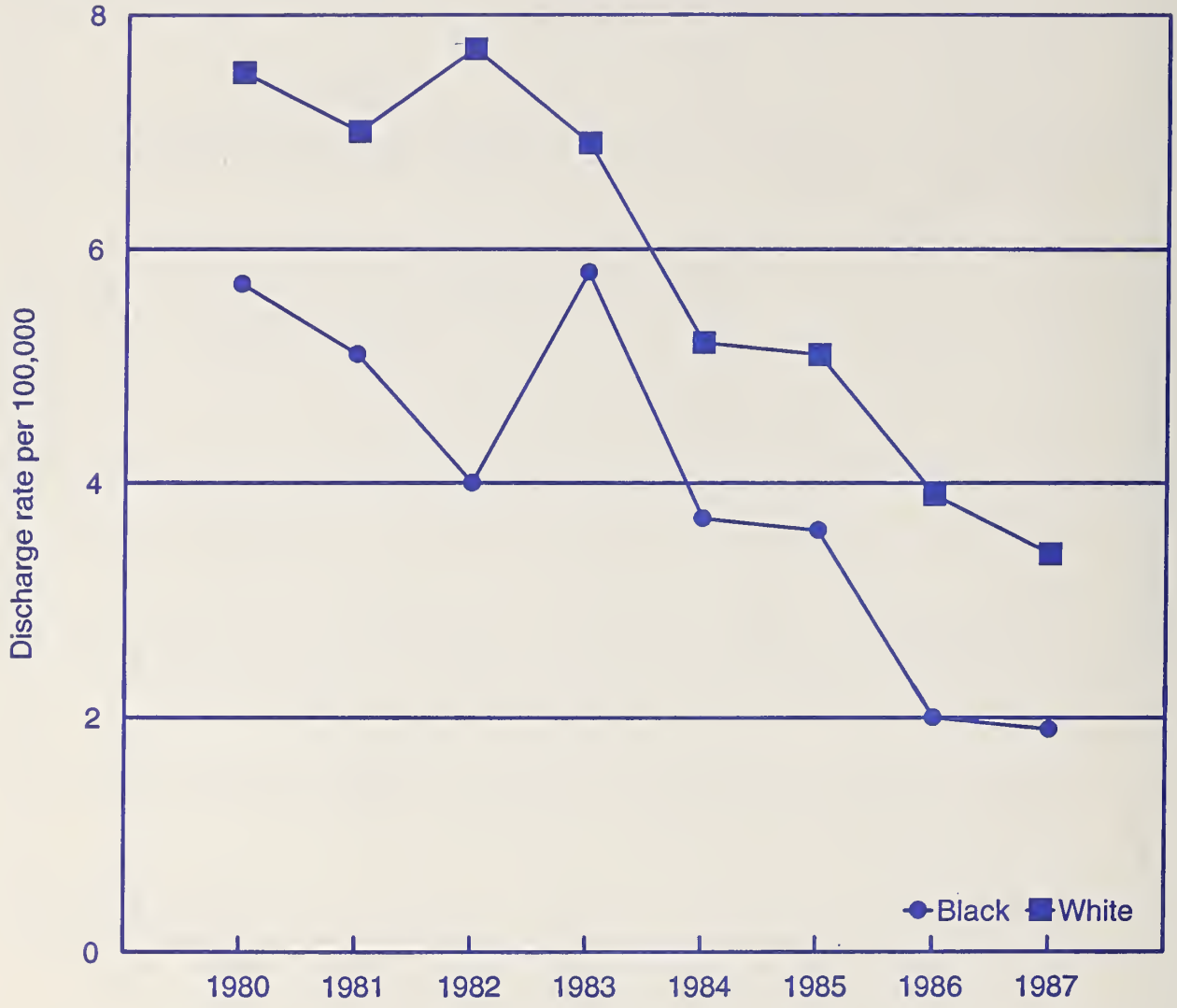
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	1.9 (0.8, 3.0)	2.6 (1.4, 3.9)	3.9 (2.2, 5.6)	1.5 (0.5, 2.5)	1.7 (0.5, 2.9)	1.0 (0.3, 1.7)	2.7 (1.4, 3.9)	1.0 (0.2, 1.8)	-9.6 (-20.9, 3.4)
White	4.9 (4.1, 5.7)	5.0 (4.1, 5.9)	4.3 (3.6, 5.0)	4.3 (3.6, 5.1)	4.1 (3.4, 4.8)	3.8 (3.0, 4.6)	3.9 (3.2, 4.6)	4.0 (3.3, 4.7)	-3.7 (-5.1, -2.2)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

32. Hodgkin's disease



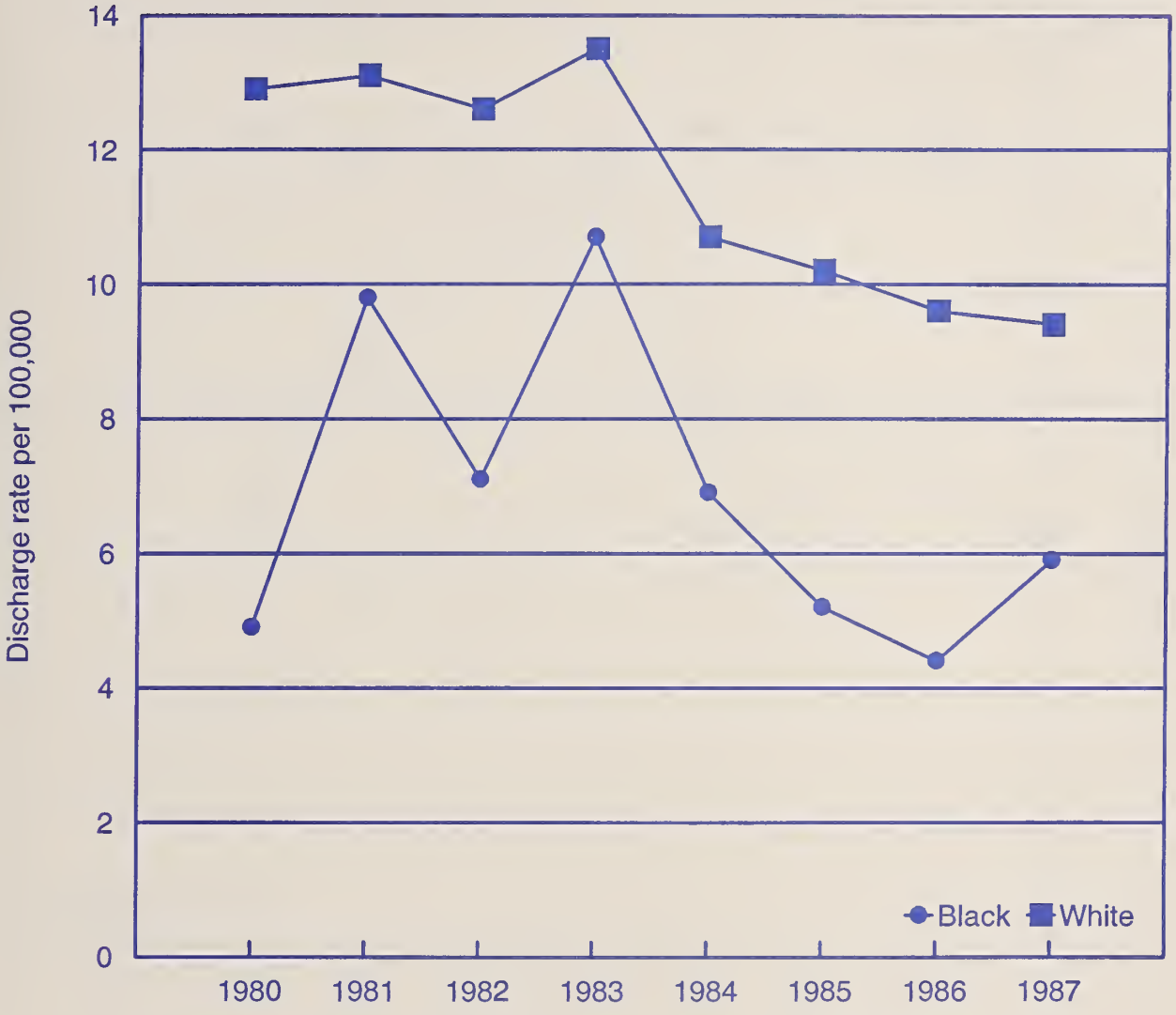
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	5.7 (3.7, 7.6)	5.1 (3.2, 6.9)	4.0 (2.0, 6.1)	5.8 (3.3, 8.2)	3.7 (2.0, 5.3)	3.6 (2.0, 5.1)	2.0 (0.8, 3.2)	1.9 (0.6, 3.3)	–14.3 (–19.7, –8.5)
White	7.5 (6.3, 8.7)	7.0 (5.8, 8.1)	7.7 (6.4, 8.9)	6.9 (5.9, 7.9)	5.2 (4.3, 6.1)	5.1 (4.1, 6.0)	3.9 (3.1, 4.6)	3.4 (2.8, 4.0)	–11.3 (–14.3, –8.1)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

33. Non-Hodgkin's lymphoma



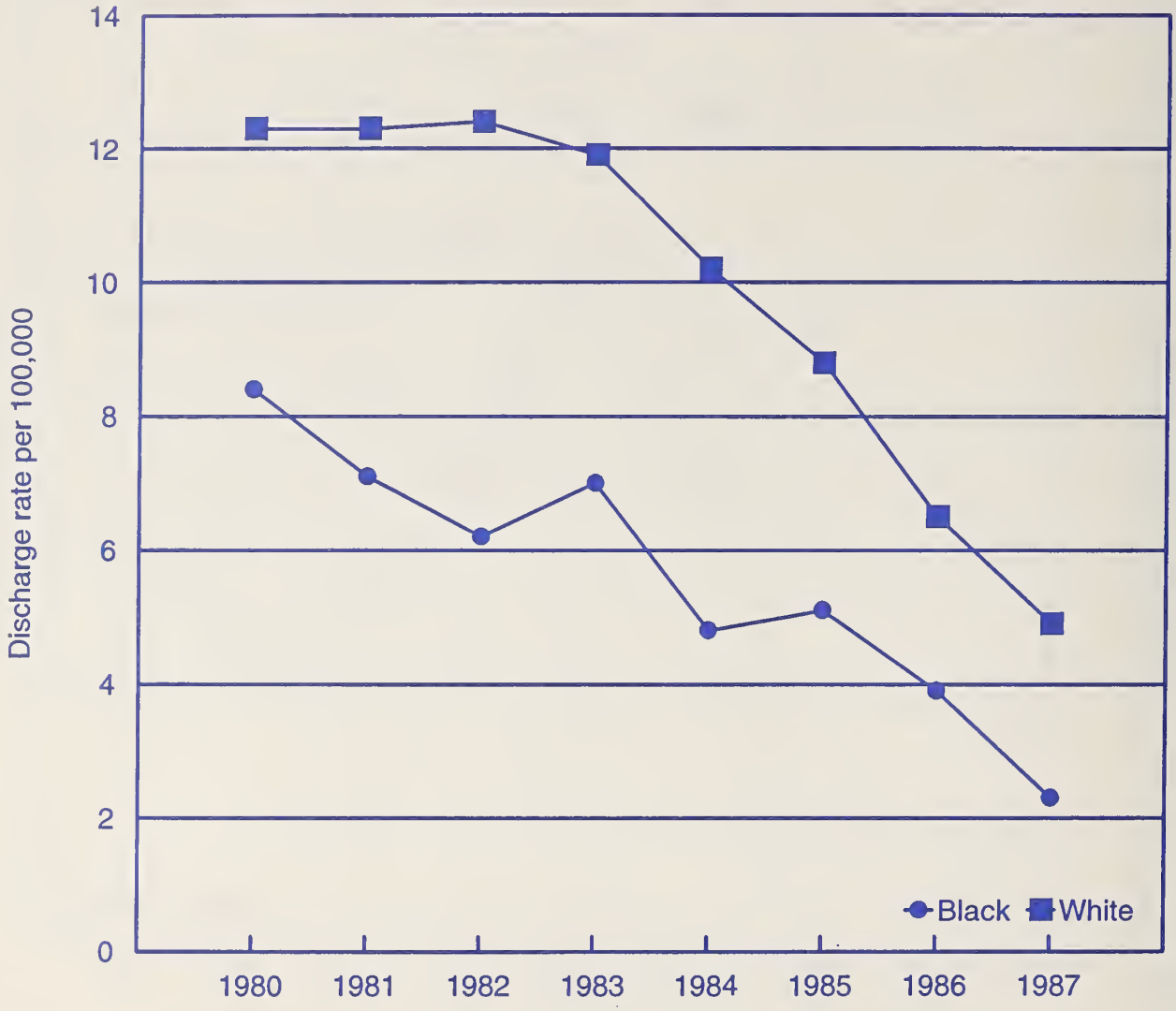
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	4.9 (2.6, 7.2)	9.8 (6.4, 13.2)	7.1 (4.5, 9.7)	10.7 (6.3, 15.2)	6.9 (4.3, 9.5)	5.2 (3.1, 7.2)	4.4 (2.5, 6.4)	5.9 (3.7, 8.1)	–4.7 (–13.5, 5.0)
White	12.9 (11.0, 14.8)	13.1 (11.6, 14.6)	12.6 (11.1, 14.2)	13.5 (11.9, 15.0)	10.7 (9.3, 12.0)	10.2 (8.9, 11.6)	9.6 (8.2, 10.9)	9.4 (8.1, 10.7)	–5.4 (–7.3, –3.4)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

34. Lymphosarcoma and reticulosarcoma



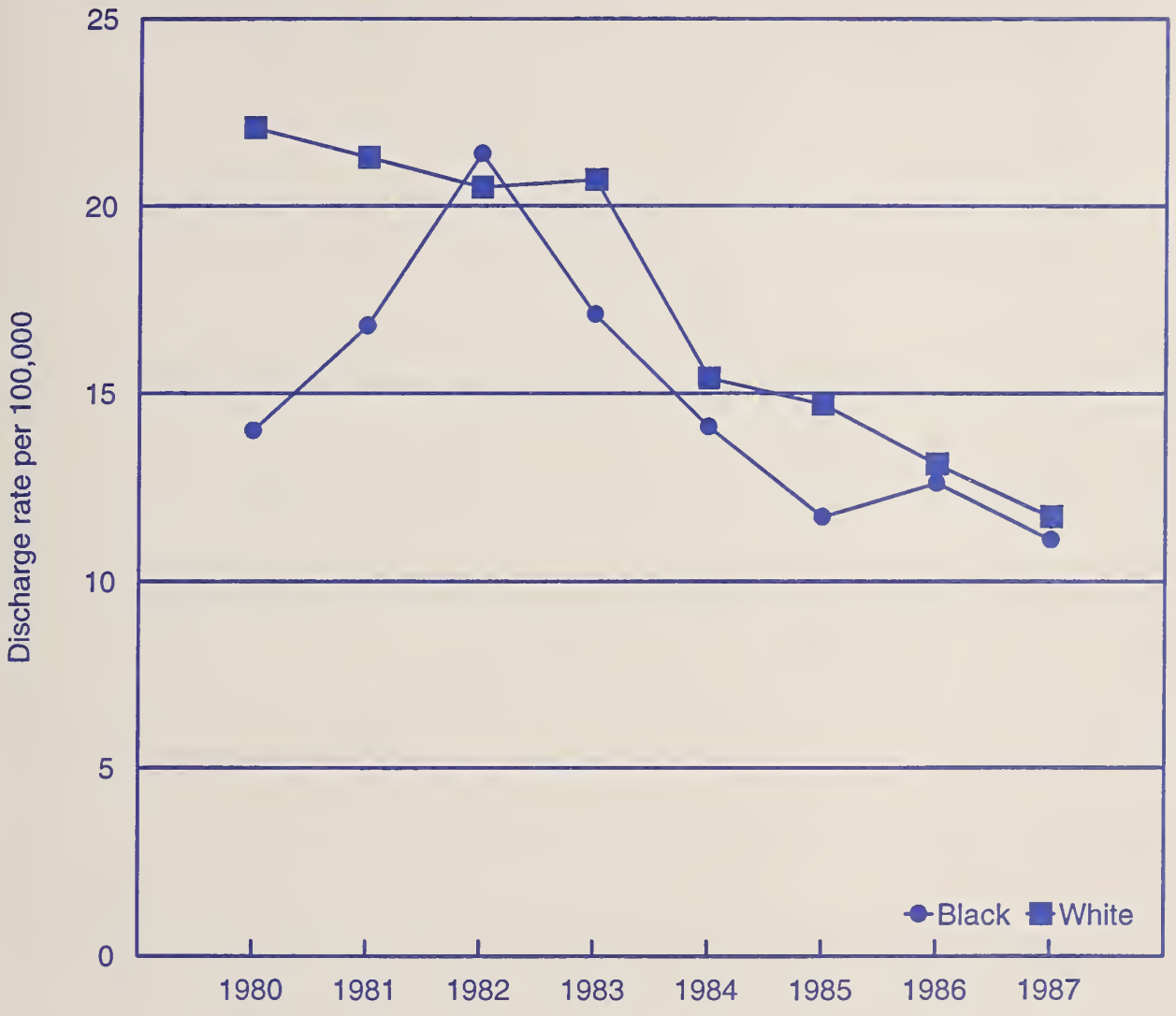
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	8.4 (4.9, 11.8)	7.1 (4.6, 9.7)	6.2 (3.6, 8.7)	7.0 (4.1, 10.0)	4.8 (2.8, 6.7)	5.1 (3.2, 7.0)	3.9 (1.7, 6.1)	2.3 (1.1, 3.5)	-14.3 (-18.8, -9.5)
White	12.3 (10.3, 14.4)	12.3 (10.4, 14.2)	12.4 (10.6, 14.2)	11.9 (10.3, 13.6)	10.2 (8.7, 11.6)	8.8 (7.5, 10.1)	6.5 (5.5, 7.4)	4.9 (4.0, 5.7)	-12.2 (-16.4, -7.8)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

35. Leukemia



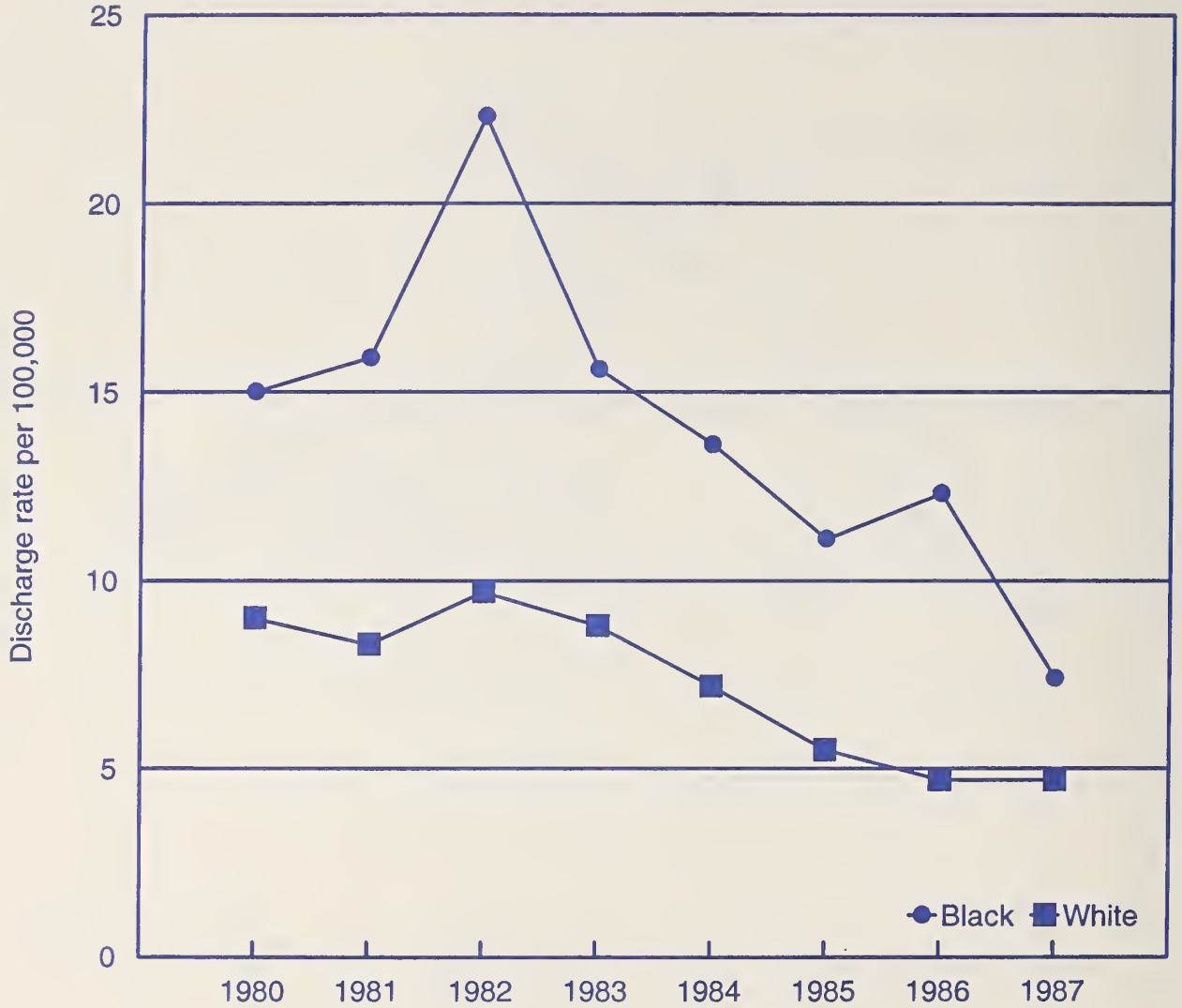
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	14.0 (9.1, 19.0)	16.8 (11.8, 21.8)	21.4 (15.0, 27.8)	17.1 (11.9, 22.4)	14.1 (9.8, 18.4)	11.7 (8.1, 15.3)	12.6 (7.6, 17.5)	11.1 (6.6, 15.5)	-5.9 (-10.8, -0.8)
White	22.1 (18.5, 25.8)	21.3 (17.2, 25.4)	20.5 (17.5, 23.5)	20.7 (17.7, 23.7)	15.4 (13.4, 17.4)	14.7 (12.6, 16.8)	13.1 (11.3, 15.0)	11.7 (9.9, 13.5)	-9.3 (-11.4, -7.2)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

36. Multiple myeloma



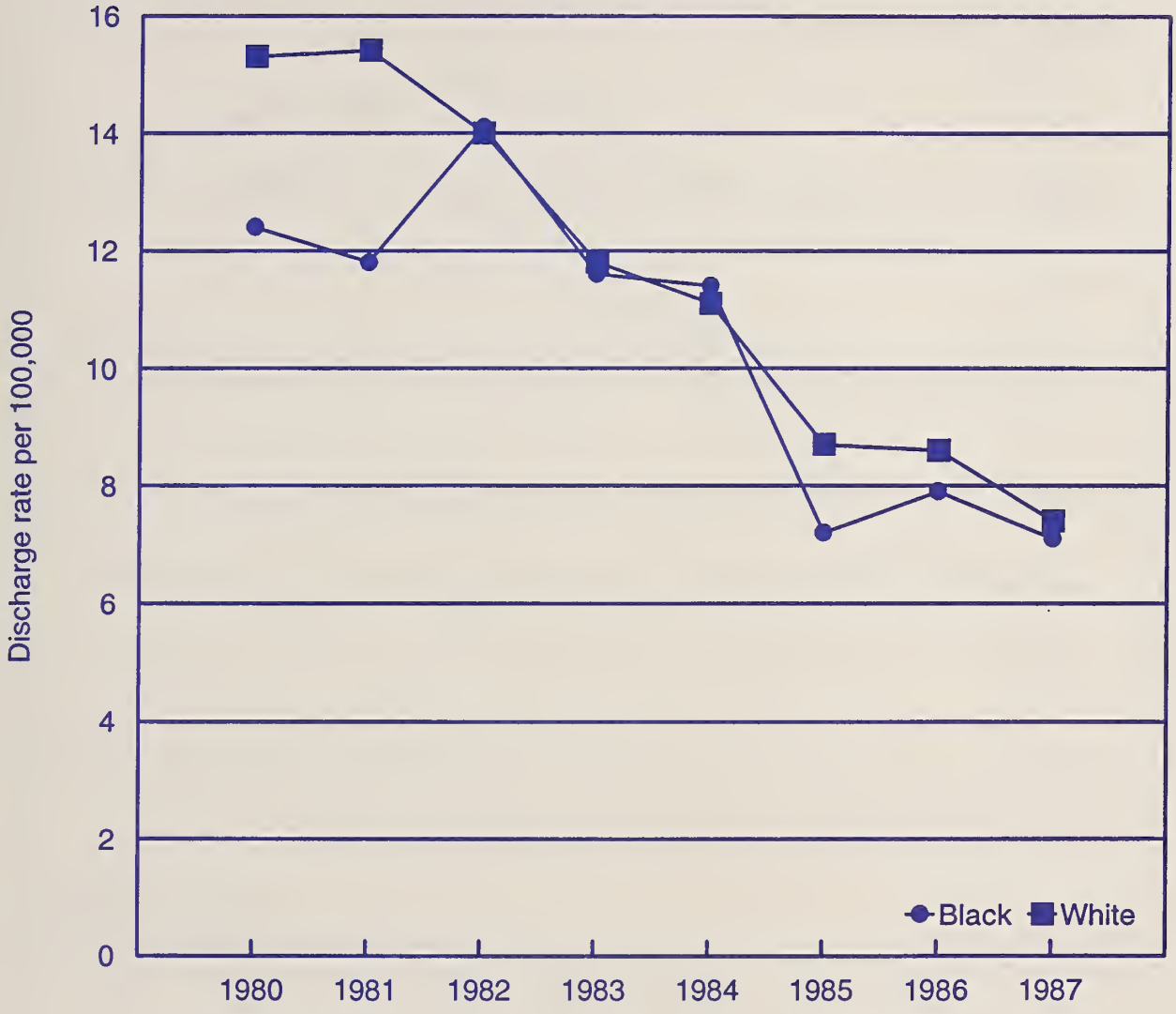
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	15.0 (10.6, 19.3)	15.9 (11.1, 20.8)	22.3 (16.5, 28.2)	15.6 (11.7, 19.5)	13.6 (9.8, 17.4)	11.1 (7.5, 14.7)	12.3 (7.4, 17.3)	7.4 (4.8, 10.0)	-9.6 (-15.4, -3.3)
White	9.0 (7.9, 10.1)	8.3 (7.1, 9.4)	9.7 (8.4, 11.1)	8.8 (7.6, 9.9)	7.2 (6.2, 8.1)	5.5 (4.6, 6.3)	4.7 (3.9, 5.5)	4.7 (4.0, 5.4)	-10.5 (-14.1, -6.6)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

37. Cancer, other primary



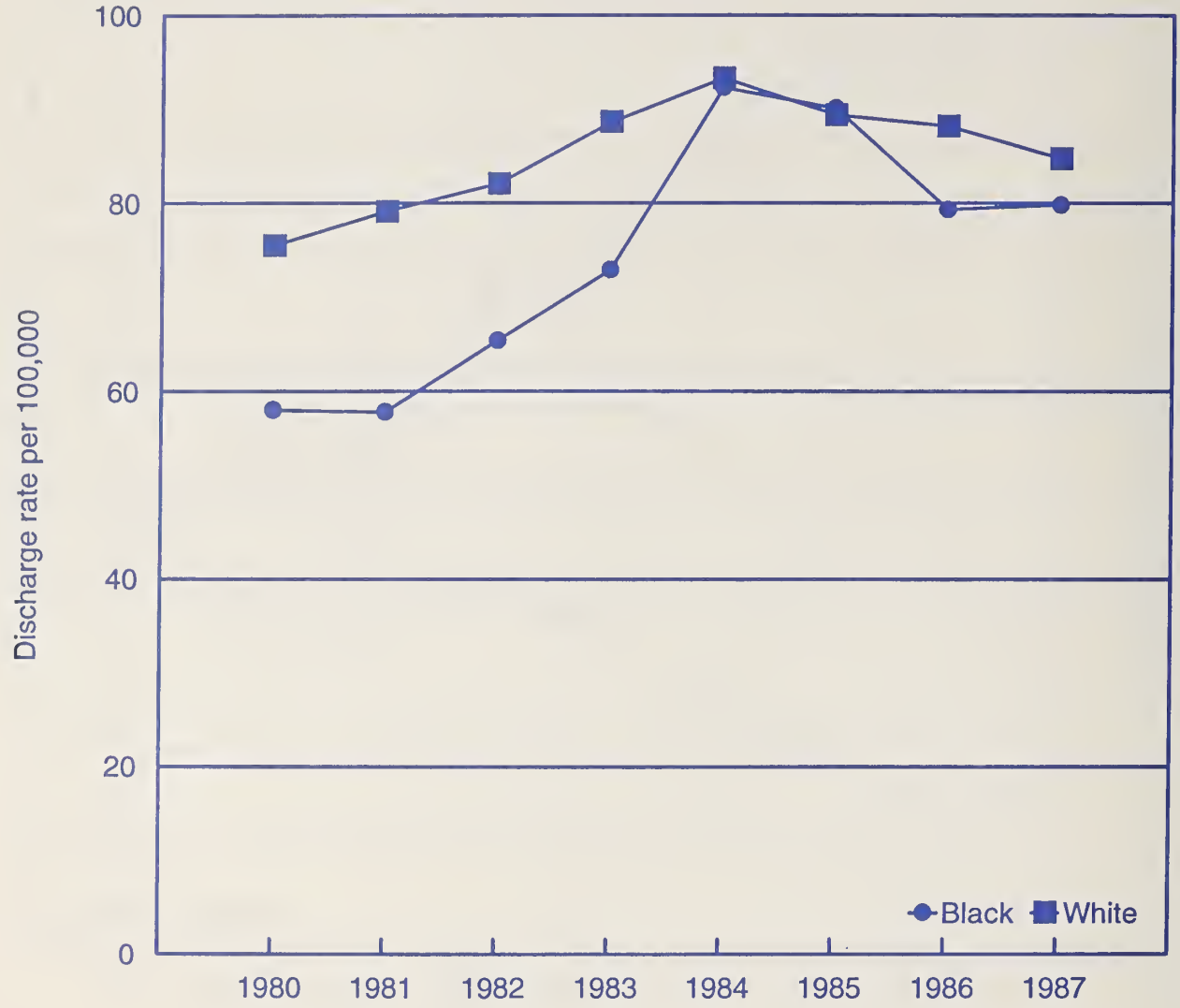
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	12.4 (8.9, 16.0)	11.8 (8.6, 15.0)	14.1 (9.1, 19.2)	11.6 (7.8, 15.4)	11.4 (7.9, 15.0)	7.2 (5.1, 9.4)	7.9 (5.3, 10.6)	7.1 (4.1, 10.1)	-9.1 (-13.1, -4.9)
White	15.3 (13.2, 17.4)	15.4 (13.7, 17.1)	14.0 (12.1, 16.0)	11.8 (10.3, 13.3)	11.1 (9.4, 12.8)	8.7 (7.3, 10.1)	8.6 (7.1, 10.1)	7.4 (6.2, 8.5)	-10.7 (-12.3, -9.1)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

38. Secondary malignancies



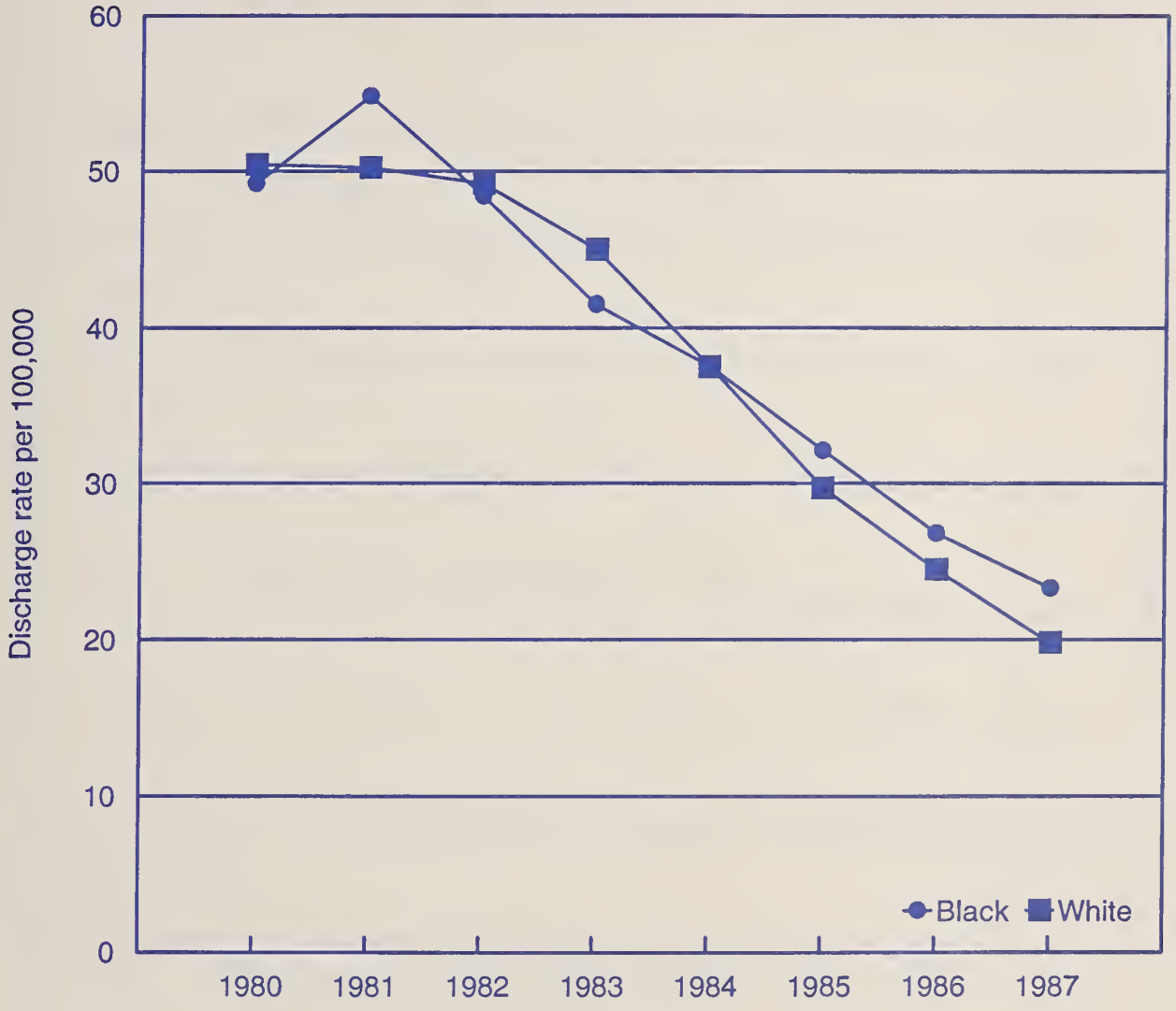
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	58.0 (44.2, 71.8)	57.8 (45.2, 70.4)	65.4 (51.0, 79.7)	72.9 (58.2, 87.6)	92.3 (75.9, 108.8)	90.1 (73.8, 106.5)	79.3 (60.9, 97.7)	79.8 (61.7, 98.0)	6.1 (2.4, 10.0)
White	75.5 (68.0, 83.0)	79.1 (69.7, 88.5)	82.1 (71.4, 92.8)	88.7 (79.9, 97.6)	93.3 (85.4, 101.2)	89.4 (80.8, 98.0)	88.2 (81.0, 95.4)	84.8 (77.0, 92.6)	2.0 (0.3, 3.7)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

39. Neoplasms of unspecified site or uncertain behavior



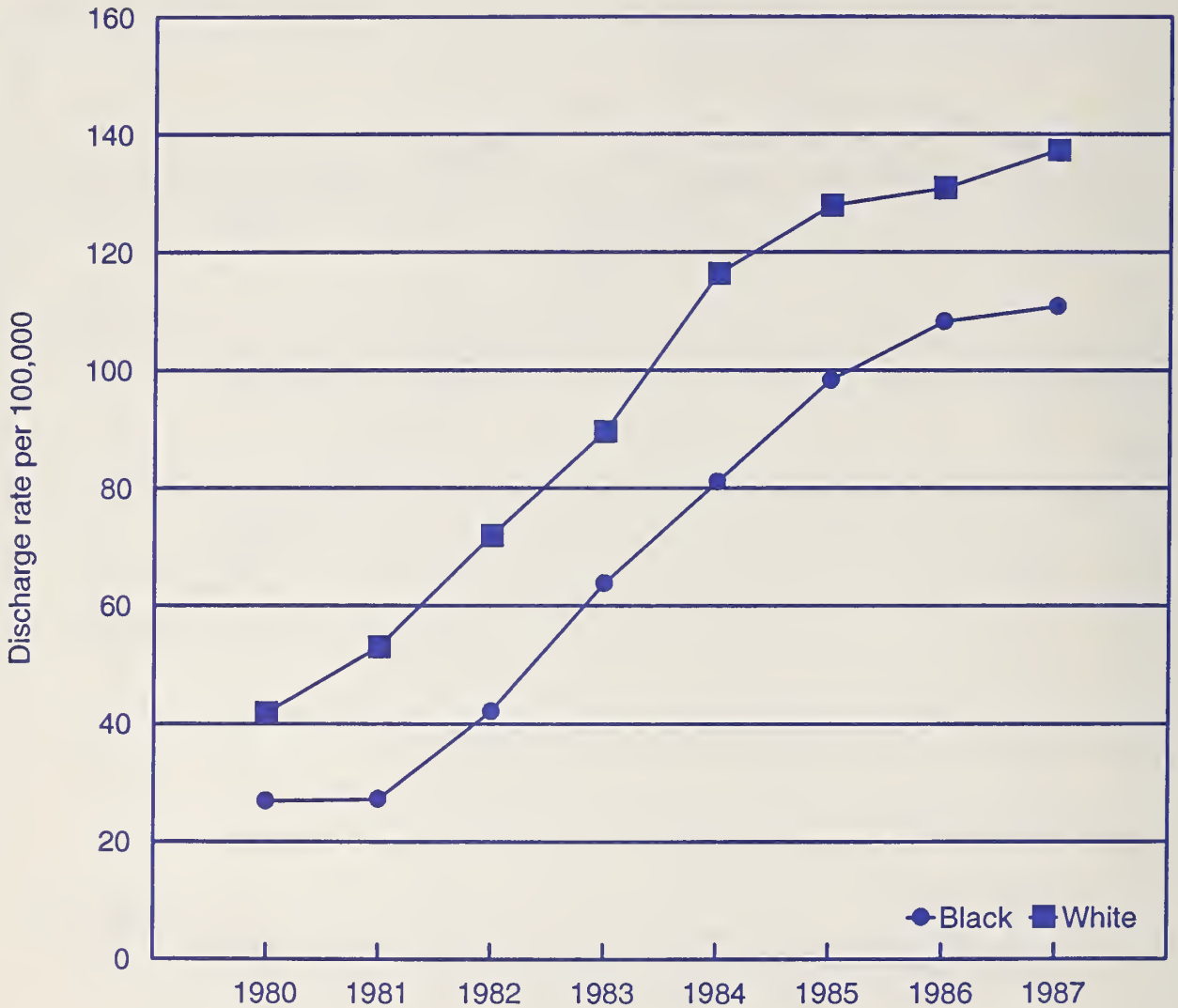
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	49.2 (38.5, 59.8)	54.8 (42.4, 67.1)	48.4 (37.9, 58.8)	41.5 (33.0, 50.0)	37.5 (29.1, 45.9)	32.1 (25.2, 39.0)	26.8 (20.1, 33.5)	23.3 (15.3, 31.3)	–11.4 (–13.6, –9.0)
White	50.4 (46.4, 54.5)	50.2 (45.7, 54.8)	49.2 (43.7, 54.7)	45.0 (41.1, 48.8)	37.5 (34.5, 40.4)	29.7 (27.2, 32.2)	24.5 (22.3, 26.7)	19.8 (17.8, 21.8)	–13.1 (–16.2, –10.0)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

40. Maintenance chemotherapy, radiotherapy



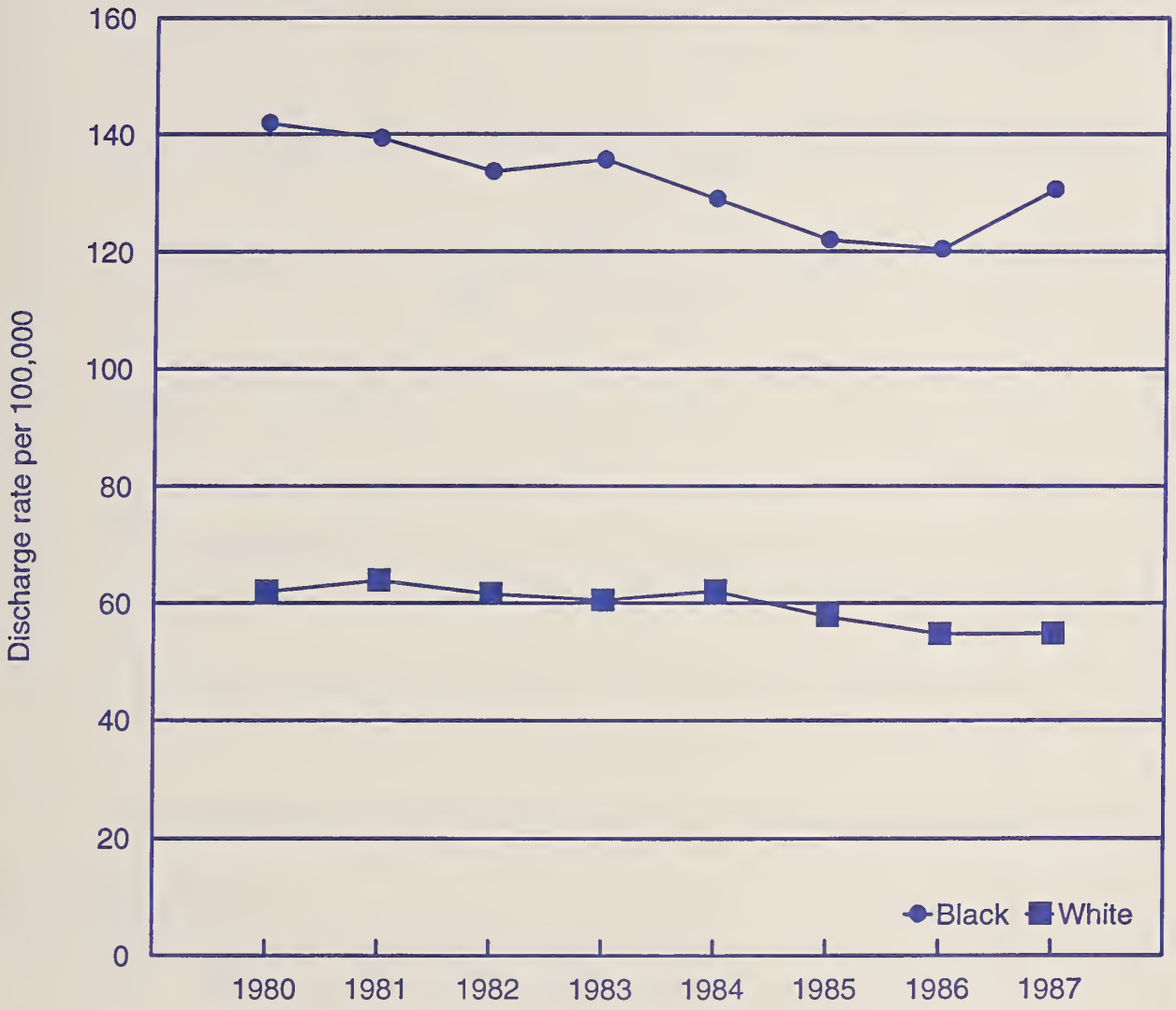
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	26.9 (16.1, 37.8)	27.2 (17.3, 37.0)	42.1 (27.4, 56.8)	63.8 (48.0, 79.6)	81.1 (59.9, 102.3)	98.3 (76.3, 120.2)	108.2 (82.9, 133.4)	110.8 (80.7, 140.9)	26.3 (20.0, 32.9)
White	41.8 (32.0, 51.7)	53.0 (41.6, 64.4)	71.9 (57.6, 86.3)	89.6 (73.7, 105.4)	116.3 (98.3, 134.3)	127.8 (105.2, 150.4)	130.8 (111.2, 150.4)	137.3 (116.8, 157.8)	19.3 (14.4, 24.4)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

41. Benign neoplasm, uterus



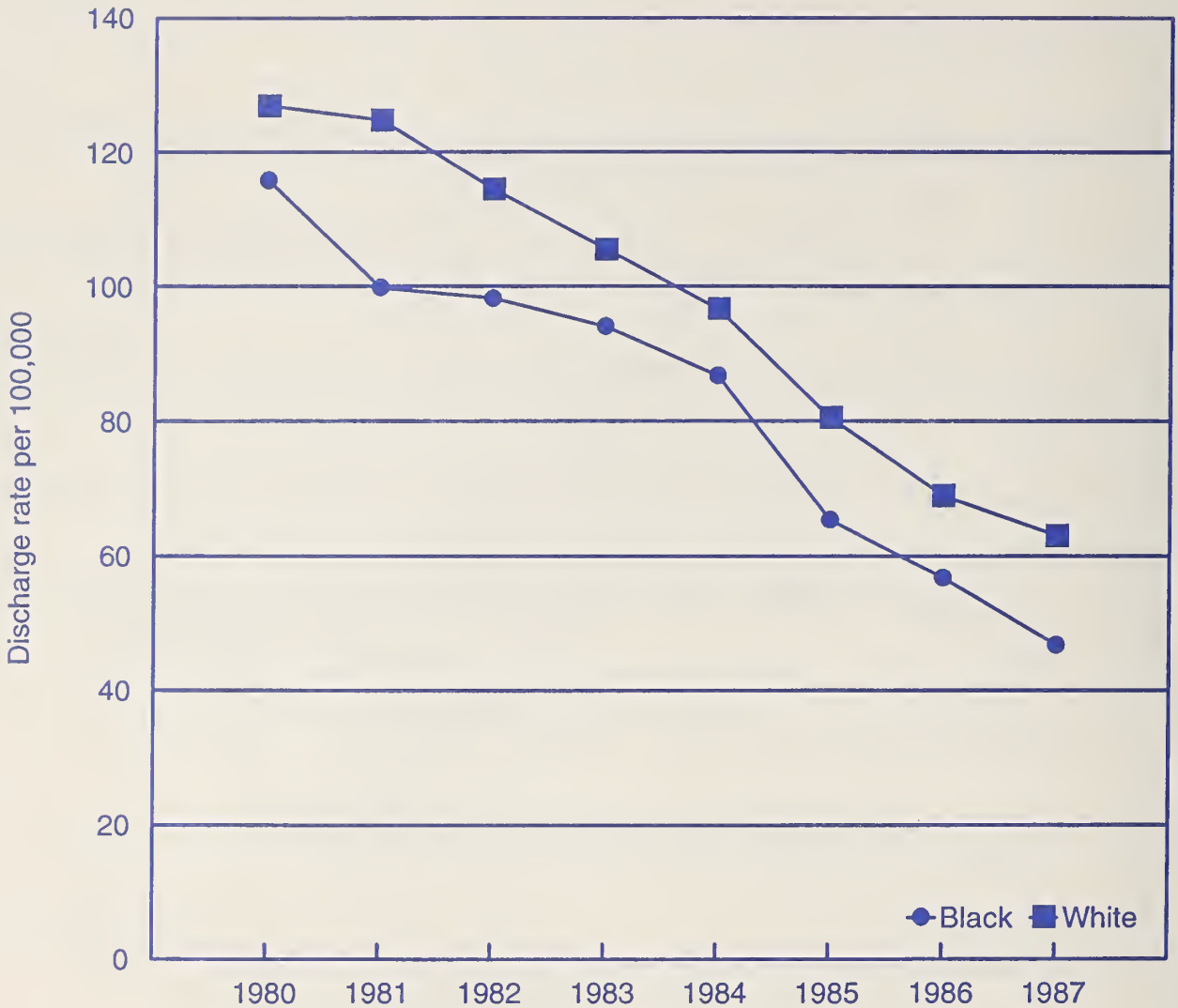
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	141.9 (114.2, 169.7)	139.3 (114.4, 164.3)	133.6 (109.8, 157.5)	135.6 (115.9, 155.3)	128.9 (108.9, 148.8)	121.9 (100.6, 143.2)	120.4 (96.2, 144.6)	130.6 (103.1, 158.2)	-1.9 (-3.0, -0.8)
White	62.0 (57.0, 67.0)	63.9 (58.3, 69.5)	61.6 (56.0, 67.2)	60.5 (55.2, 65.7)	62.1 (57.0, 67.2)	57.7 (52.4, 63.0)	54.7 (49.5, 59.8)	54.8 (49.6, 60.0)	-2.1 (-3.0, -1.2)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

42. Other benign neoplasms



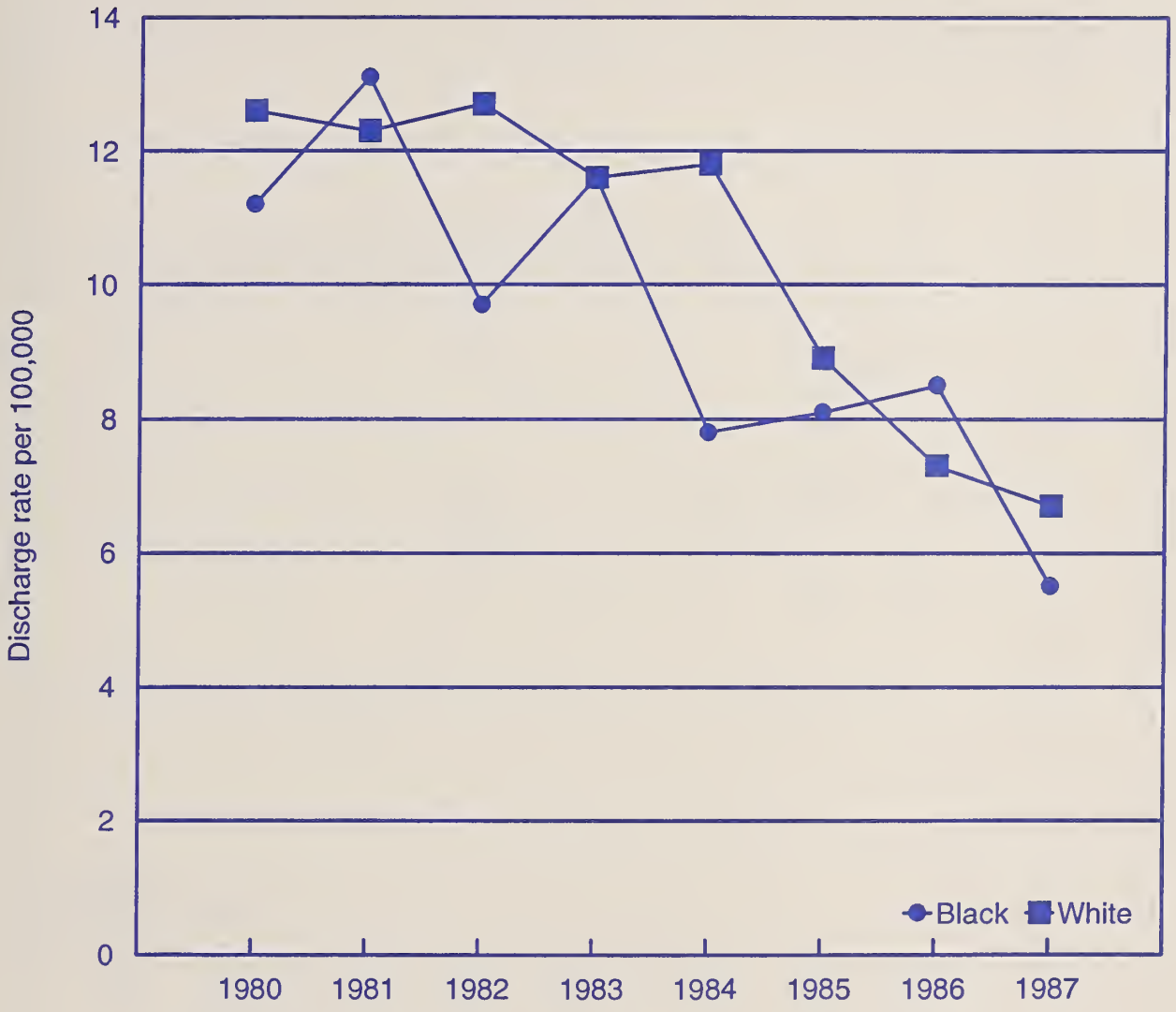
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	115.8 (96.9, 134.7)	99.8 (85.5, 114.1)	98.2 (84.4, 112.0)	94.0 (78.7, 109.4)	86.7 (69.9, 103.4)	65.3 (53.6, 77.1)	56.7 (45.8, 67.6)	46.7 (37.6, 55.8)	-11.7 (-14.2, -9.2)
White	126.9 (118.2, 135.7)	124.7 (115.8, 133.7)	114.5 (105.7, 123.3)	105.5 (96.6, 114.4)	96.6 (88.9, 104.4)	80.5 (72.1, 88.9)	68.9 (60.8, 77.0)	63.0 (54.0, 72.0)	-10.2 (-11.7, -8.6)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

43. Carcinoma in situ, cervix



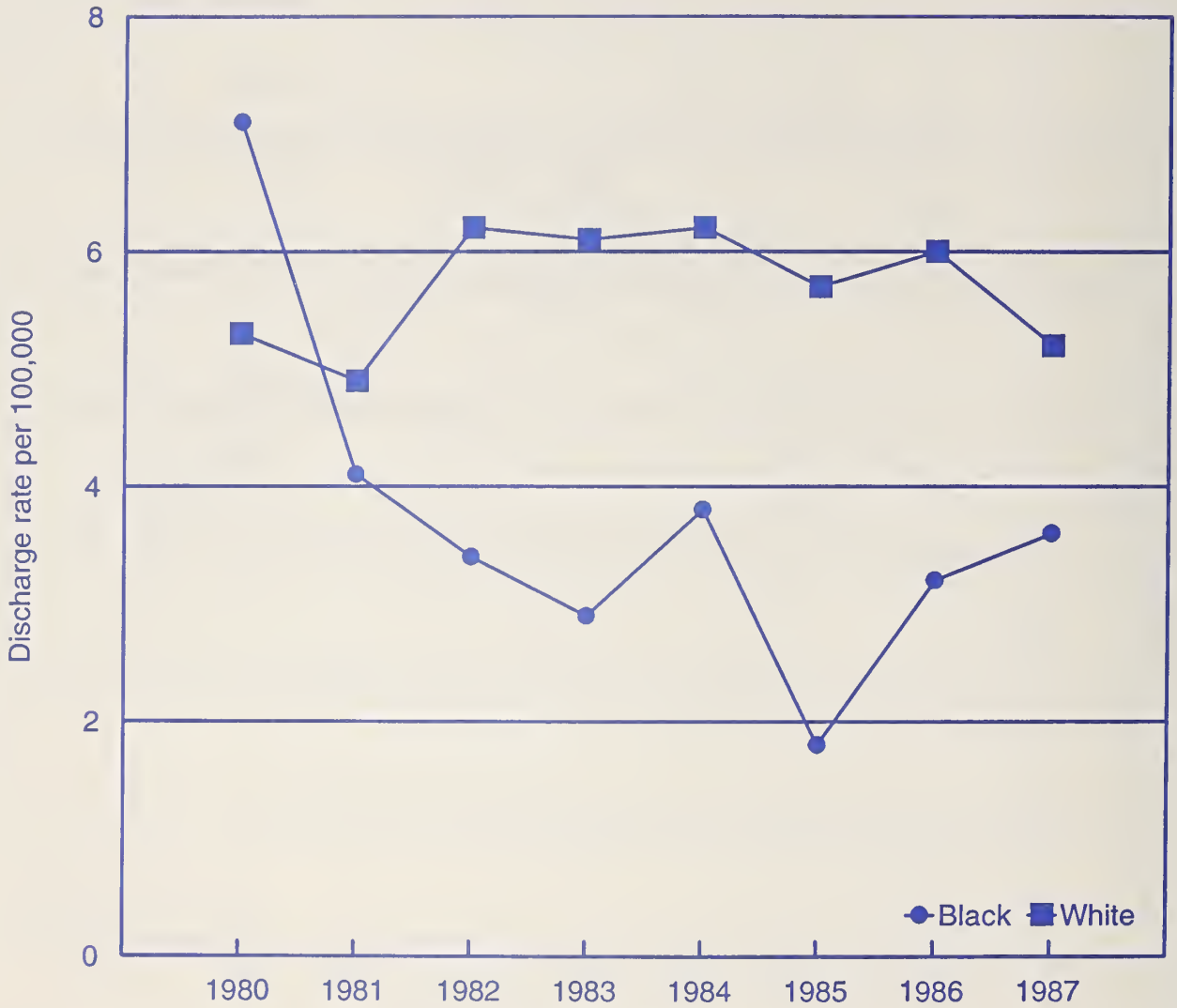
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	11.2 (7.7, 14.7)	13.1 (9.5, 16.7)	9.7 (7.2, 12.2)	11.6 (8.6, 14.7)	7.8 (5.3, 10.4)	8.1 (4.6, 11.5)	8.5 (5.4, 11.6)	5.5 (3.1, 7.8)	-9.2 (-13.4, -4.8)
White	12.6 (10.9, 14.3)	12.3 (10.3, 14.3)	12.7 (10.8, 14.6)	11.6 (10.0, 13.2)	11.8 (9.3, 14.2)	8.9 (7.7, 10.2)	7.3 (6.2, 8.4)	6.7 (5.7, 7.8)	-9.1 (-12.3, -5.8)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

44. Other carcinoma in situ



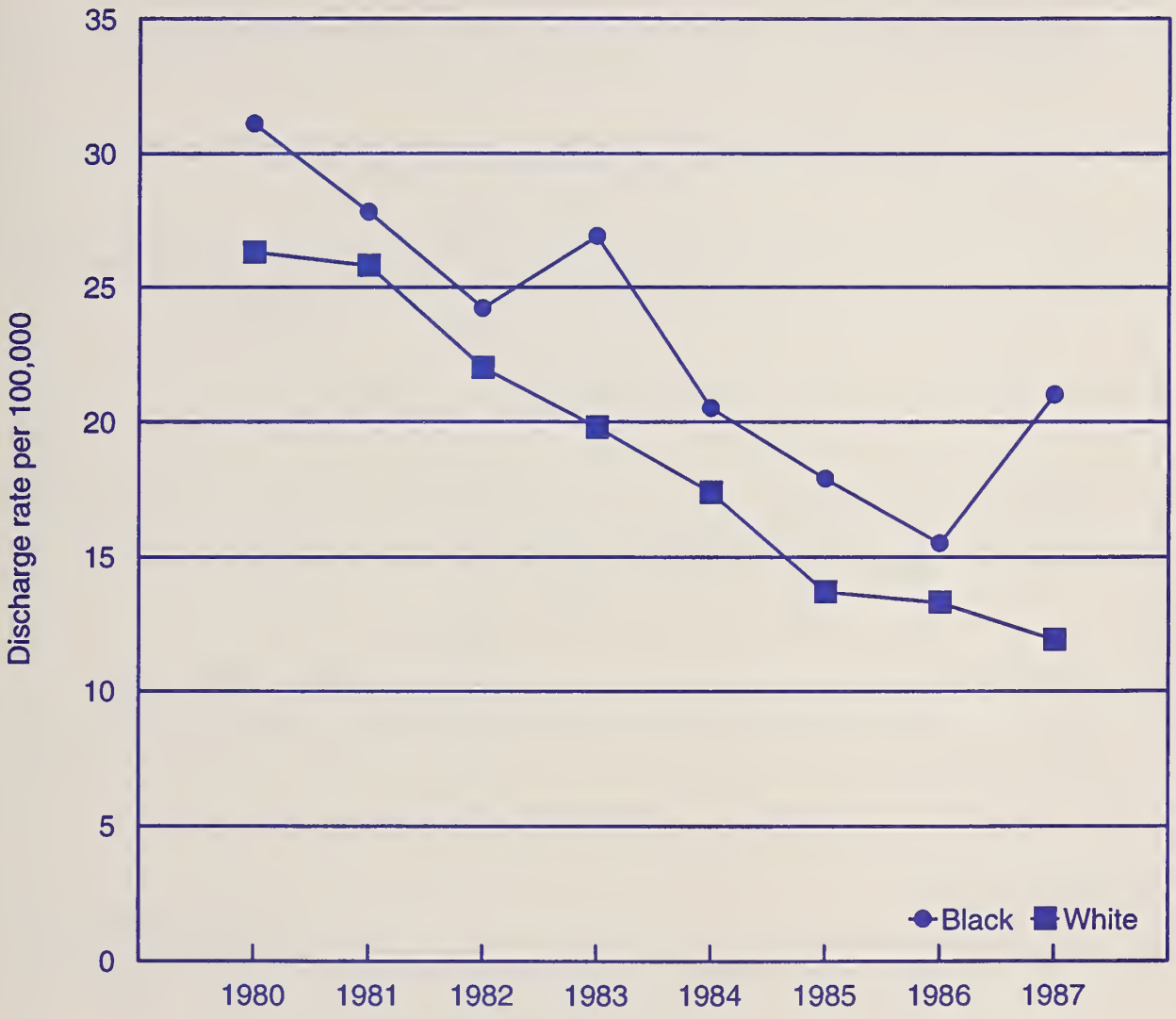
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	7.1 (3.9, 10.3)	4.1 (2.0, 6.3)	3.4 (2.0, 4.7)	2.9 (1.5, 4.3)	3.8 (1.7, 5.8)	1.8 (0.5, 3.1)	3.2 (1.4, 4.9)	3.6 (2.0, 5.3)	-8.7 (-17.6, 1.1)
White	5.3 (4.6, 6.1)	4.9 (4.1, 5.7)	6.2 (5.3, 7.1)	6.1 (5.1, 7.0)	6.2 (5.3, 7.2)	5.7 (4.8, 6.7)	6.0 (4.9, 7.0)	5.2 (4.5, 6.0)	0.8 (-2.0, 3.6)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

45. Thyroid disorders



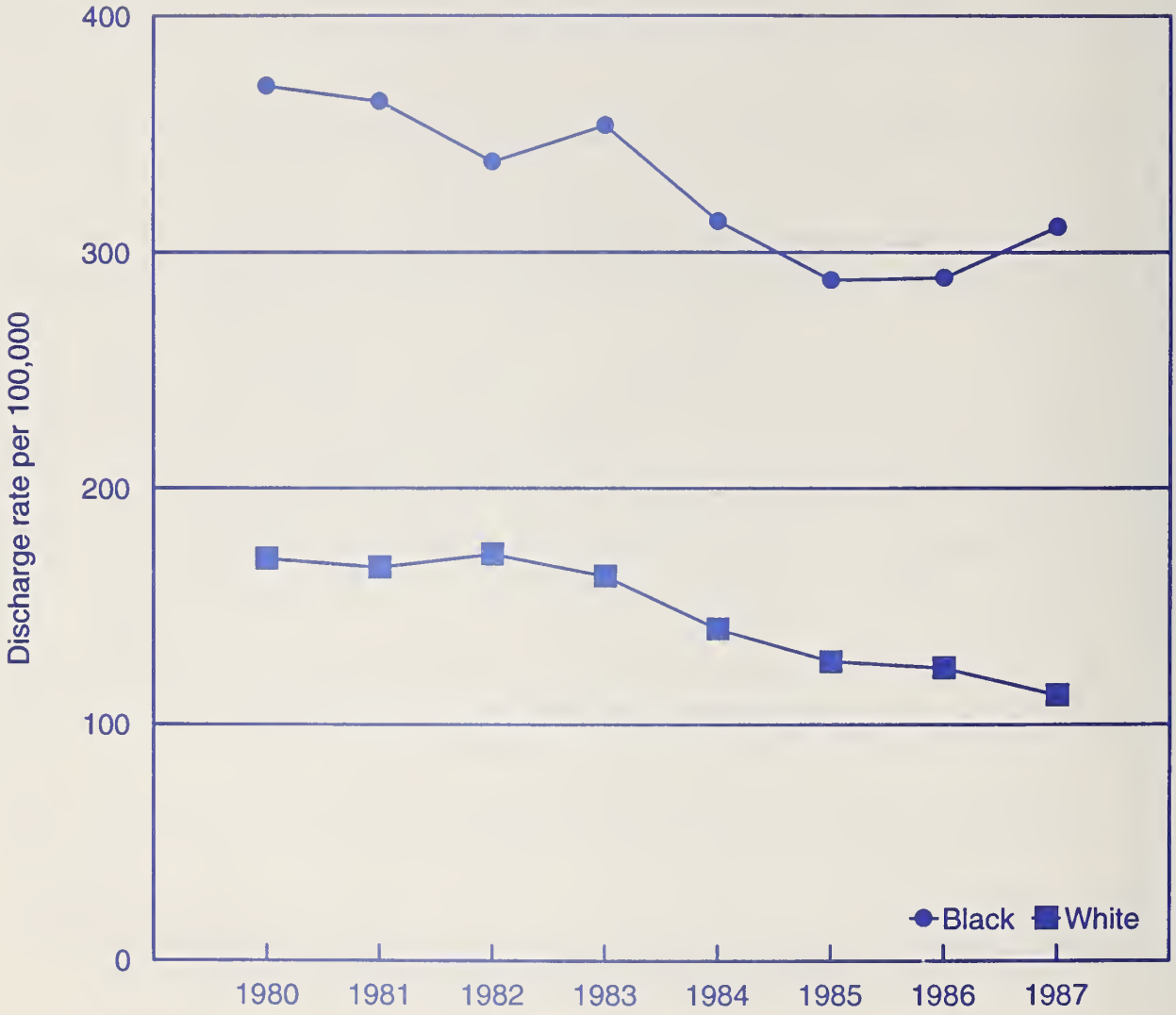
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	31.1 (25.2, 37.1)	27.8 (21.7, 33.9)	24.2 (18.9, 29.5)	26.9 (21.0, 32.9)	20.5 (16.2, 24.9)	17.9 (12.2, 23.5)	15.5 (11.4, 19.7)	21.0 (15.5, 26.4)	–7.8 (–11.6, –4.0)
White	26.3 (23.7, 28.9)	25.8 (23.5, 28.1)	22.0 (19.9, 24.0)	19.8 (17.8, 21.8)	17.4 (15.8, 19.0)	13.7 (12.1, 15.3)	13.3 (11.5, 15.2)	11.9 (10.5, 13.2)	–11.7 (–13.0, –10.3)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

46. Diabetes mellitus



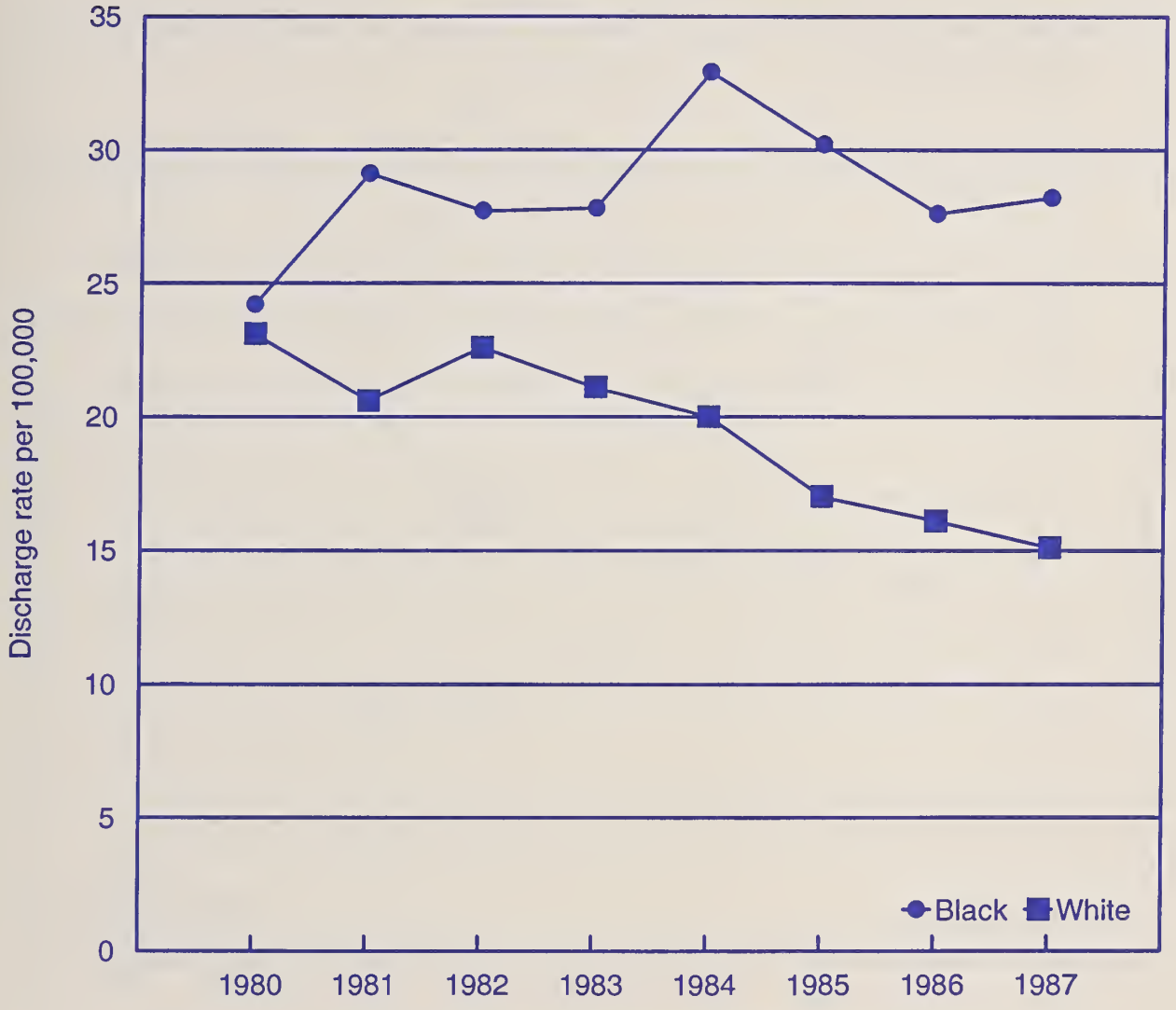
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	370.2 (308.8, 431.5)	363.7 (313.1, 414.2)	338.2 (290.6, 385.9)	353.5 (305.5, 401.5)	313.1 (270.8, 355.4)	288.1 (246.8, 329.4)	289.1 (246.4, 331.8)	310.8 (256.7, 364.8)	-3.5 (-5.0, -1.9)
White	170.4 (161.3, 179.4)	166.7 (157.6, 175.8)	172.3 (162.0, 182.7)	163.0 (152.9, 173.2)	140.5 (131.9, 149.2)	126.7 (118.2, 135.2)	124.0 (116.3, 131.6)	112.4 (105.0, 119.9)	-6.3 (-7.9, -4.6)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

47. Other endocrine disorders



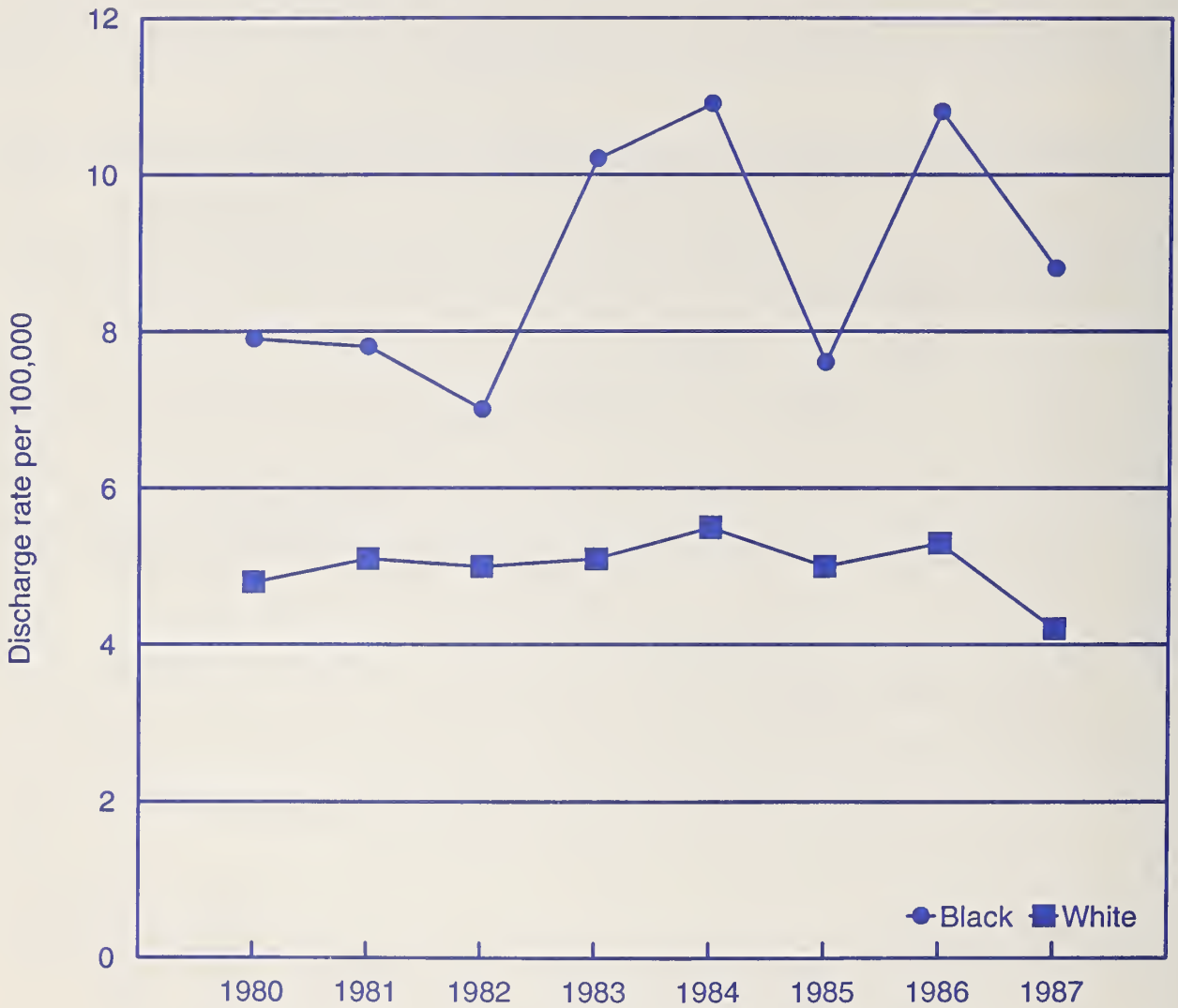
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	24.2 (19.3, 29.1)	29.1 (22.6, 35.7)	27.7 (21.7, 33.7)	27.8 (21.8, 33.7)	32.9 (26.6, 39.2)	30.2 (23.7, 36.6)	27.6 (21.0, 34.2)	28.2 (22.2, 34.2)	1.5 (–1.2, 4.2)
White	23.1 (20.4, 25.7)	20.6 (18.5, 22.7)	22.6 (19.9, 25.2)	21.1 (19.0, 23.3)	20.0 (17.9, 22.1)	17.0 (15.2, 18.8)	16.1 (14.6, 17.7)	15.1 (13.4, 16.7)	–5.9 (–7.7, –4.1)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

48. Nutritional deficiencies



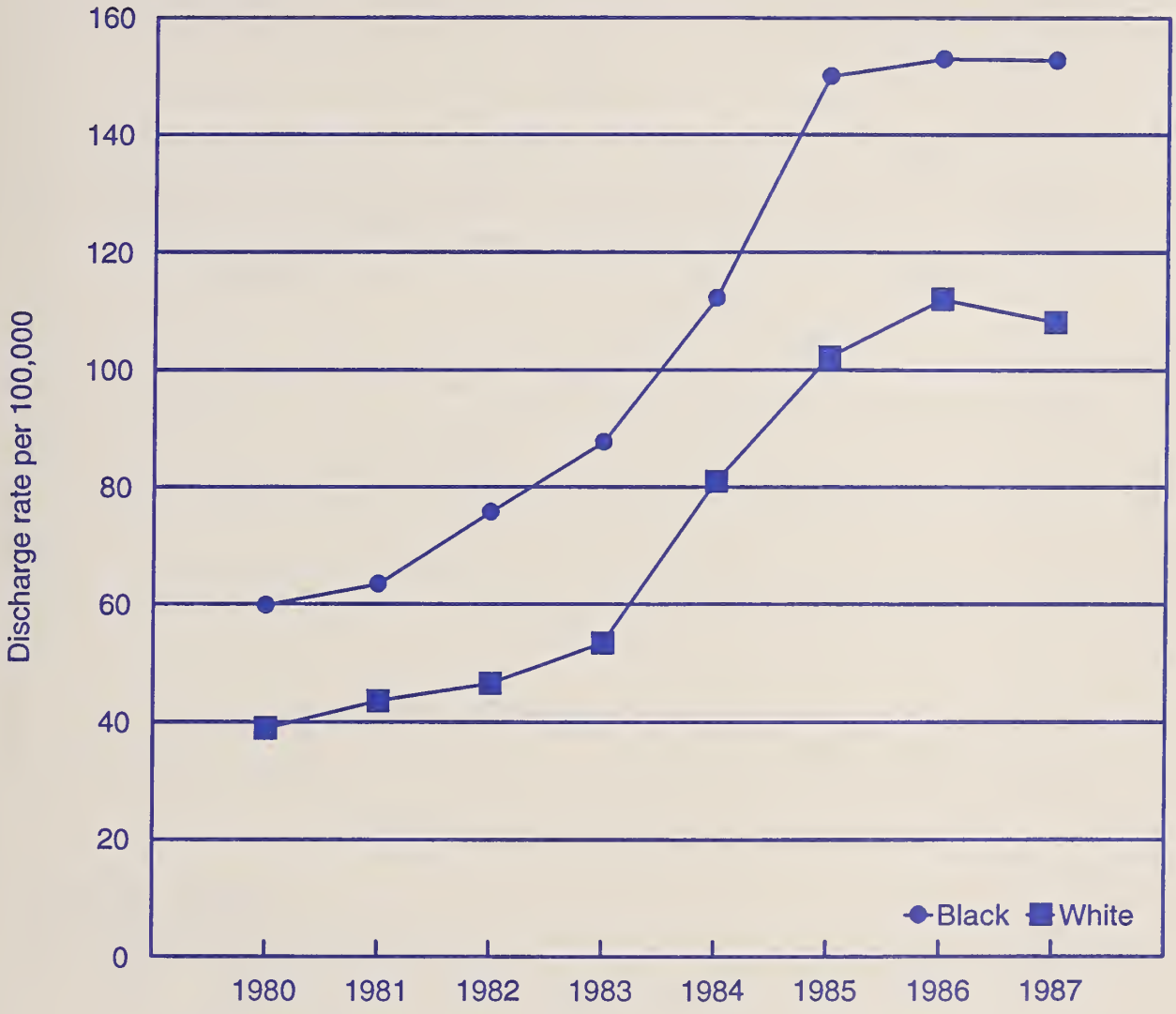
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	7.9 (4.9, 10.8)	7.8 (4.9, 10.6)	7.0 (4.7, 9.4)	10.2 (6.9, 13.4)	10.9 (7.7, 14.1)	7.6 (5.1, 10.0)	10.8 (6.4, 15.2)	8.8 (5.2, 12.5)	3.4 (–1.6, 8.6)
White	4.8 (4.1, 5.5)	5.1 (4.4, 5.8)	5.0 (4.3, 5.8)	5.1 (4.4, 5.7)	5.5 (4.7, 6.2)	5.0 (4.3, 5.7)	5.3 (4.4, 6.2)	4.2 (3.5, 5.0)	–0.7 (–3.1, 1.8)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

49. Fluid and electrolyte disorders



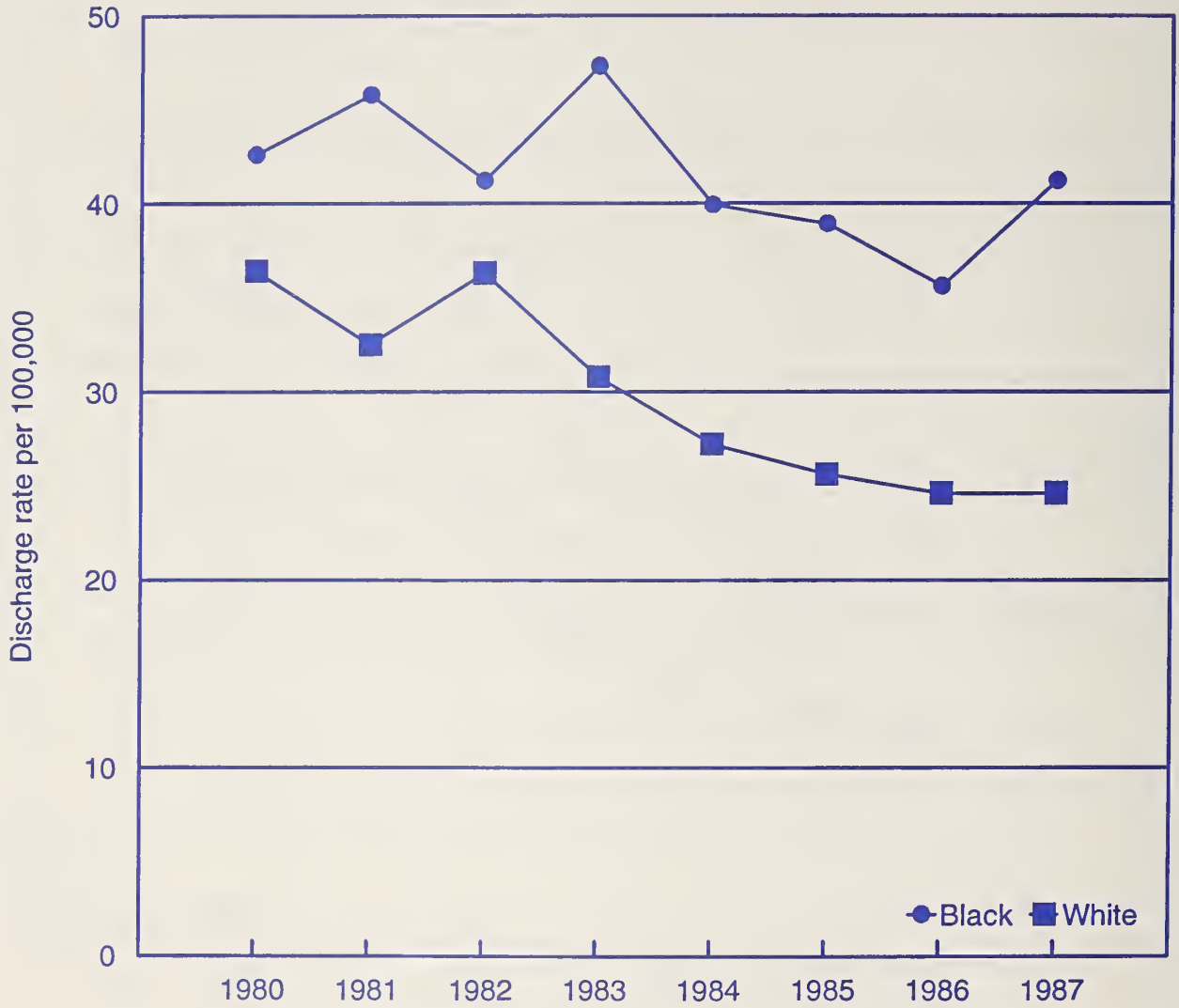
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	59.8 (48.3, 71.2)	63.4 (53.0, 73.7)	75.7 (64.1, 87.2)	87.7 (72.1, 103.3)	112.2 (92.5, 131.8)	150.0 (122.3, 177.7)	152.9 (126.1, 179.7)	152.7 (121.9, 183.5)	17.1 (13.7, 20.6)
White	38.9 (36.3, 41.6)	43.5 (40.5, 46.6)	46.5 (43.4, 49.7)	53.4 (49.7, 57.1)	81.0 (75.2, 86.8)	102.2 (94.9, 109.5)	112.0 (103.0, 121.0)	108.1 (98.3, 117.8)	19.1 (14.6, 23.7)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

50. Other metabolic and immunity disorders



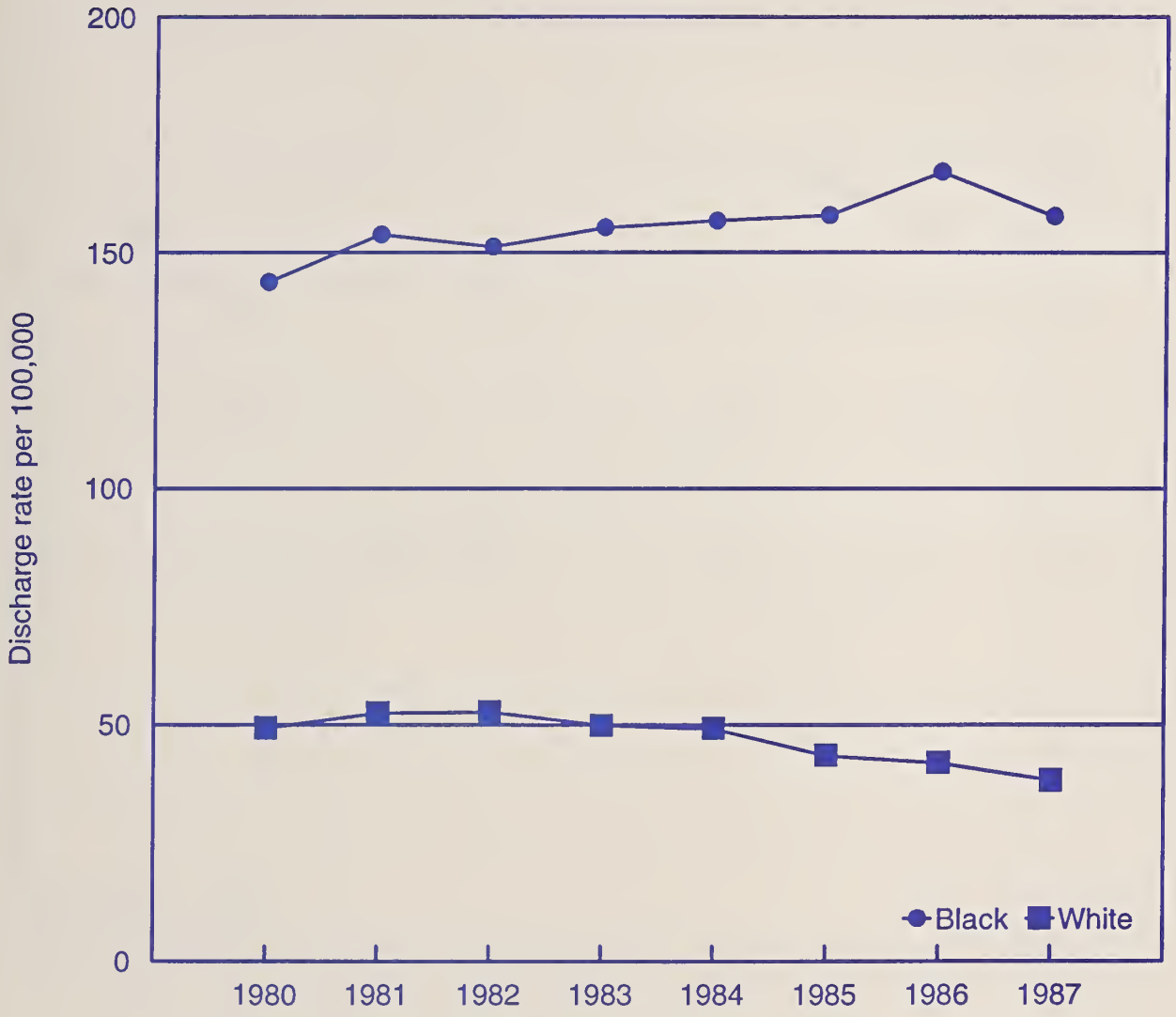
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	42.6 (34.1, 51.1)	45.8 (37.6, 53.9)	41.2 (34.0, 48.3)	47.3 (39.1, 55.6)	39.9 (32.1, 47.8)	38.9 (31.8, 46.0)	35.6 (26.5, 44.6)	41.2 (30.7, 51.8)	–2.2 (–4.5, 0.2)
White	36.4 (32.7, 40.1)	32.5 (29.2, 35.8)	36.3 (32.3, 40.2)	30.8 (27.7, 33.8)	27.2 (24.3, 30.2)	25.6 (22.3, 28.8)	24.6 (21.9, 27.3)	24.6 (21.4, 27.7)	–6.1 (–7.9, –4.3)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

51. Anemias



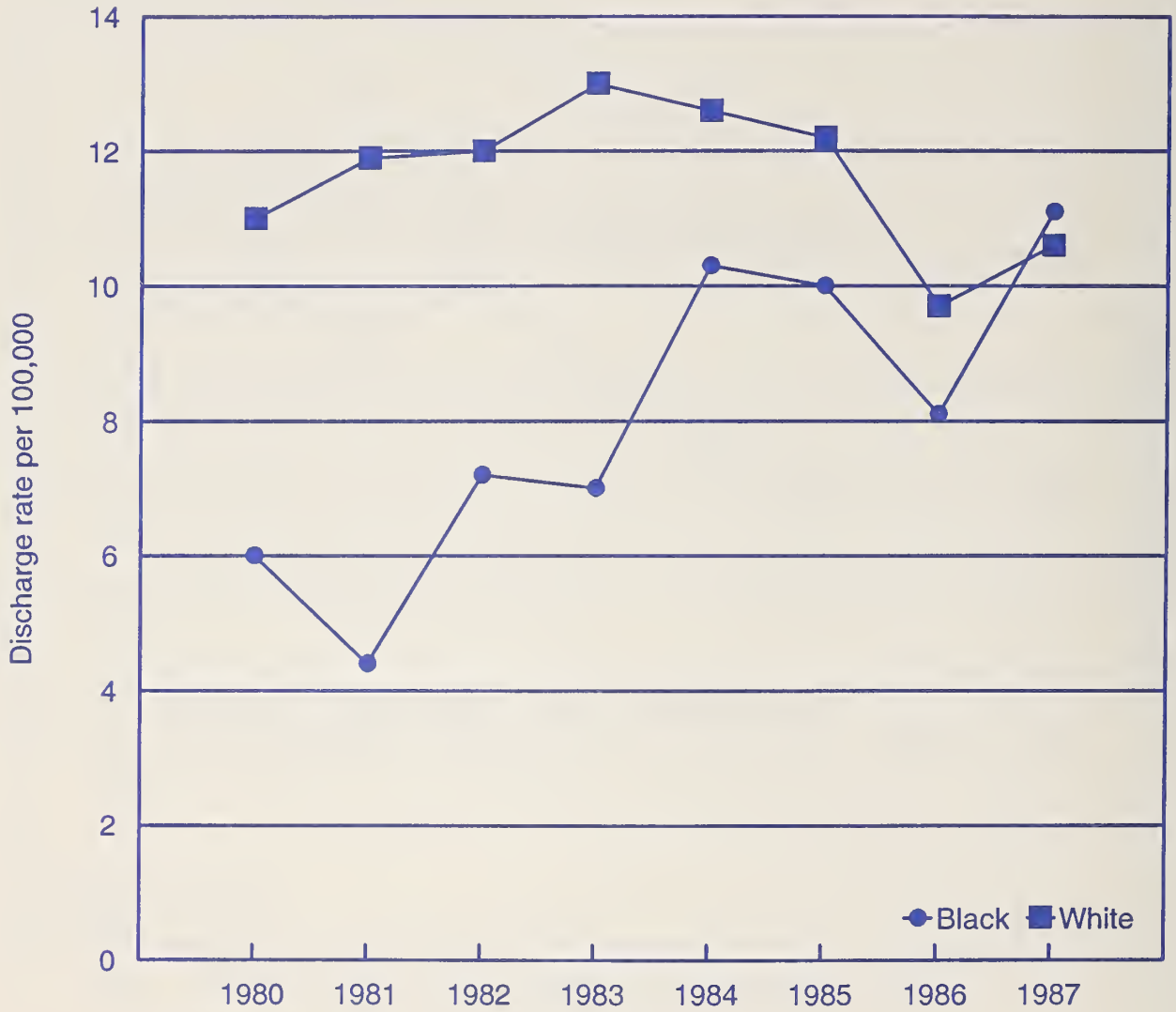
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	143.6 (118.4, 168.7)	153.7 (130.0, 177.4)	151.1 (128.6, 173.6)	155.2 (130.0, 180.3)	156.6 (130.5, 182.8)	157.8 (129.5, 186.1)	167.1 (132.5, 201.7)	157.6 (127.7, 187.4)	1.4 (0.6, 2.3)
White	49.2 (46.0, 52.5)	52.4 (48.8, 56.1)	52.6 (49.1, 56.0)	49.8 (46.4, 53.1)	49.1 (45.5, 52.7)	43.4 (39.9, 46.9)	41.9 (37.9, 45.9)	38.2 (34.8, 41.6)	–4.1 (–5.8, –2.3)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

52. Coagulation and hemorrhagic disorders



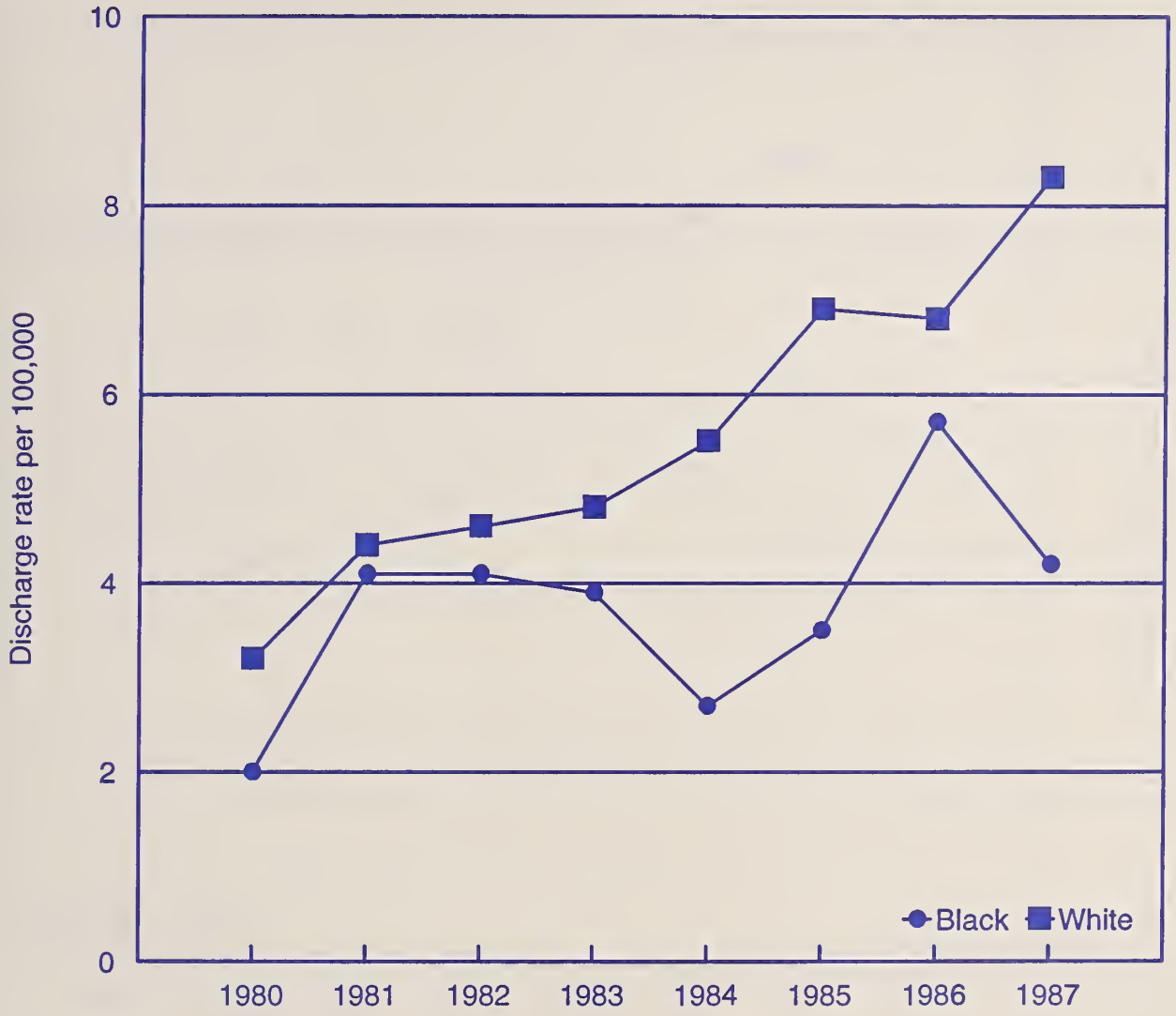
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	6.0 (3.7, 8.2)	4.4 (2.7, 6.2)	7.2 (4.4, 9.9)	7.0 (4.8, 9.1)	10.3 (7.2, 13.4)	10.0 (6.9, 13.1)	8.1 (5.5, 10.6)	11.1 (7.8, 14.3)	10.9 (4.6, 17.6)
White	11.0 (9.5, 12.5)	11.9 (10.3, 13.4)	12.0 (10.4, 13.6)	13.0 (11.3, 14.7)	12.6 (10.9, 14.3)	12.2 (10.6, 13.9)	9.7 (8.4, 10.9)	10.6 (9.4, 11.8)	-1.5 (-4.4, 1.5)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

53. Diseases of white blood cells



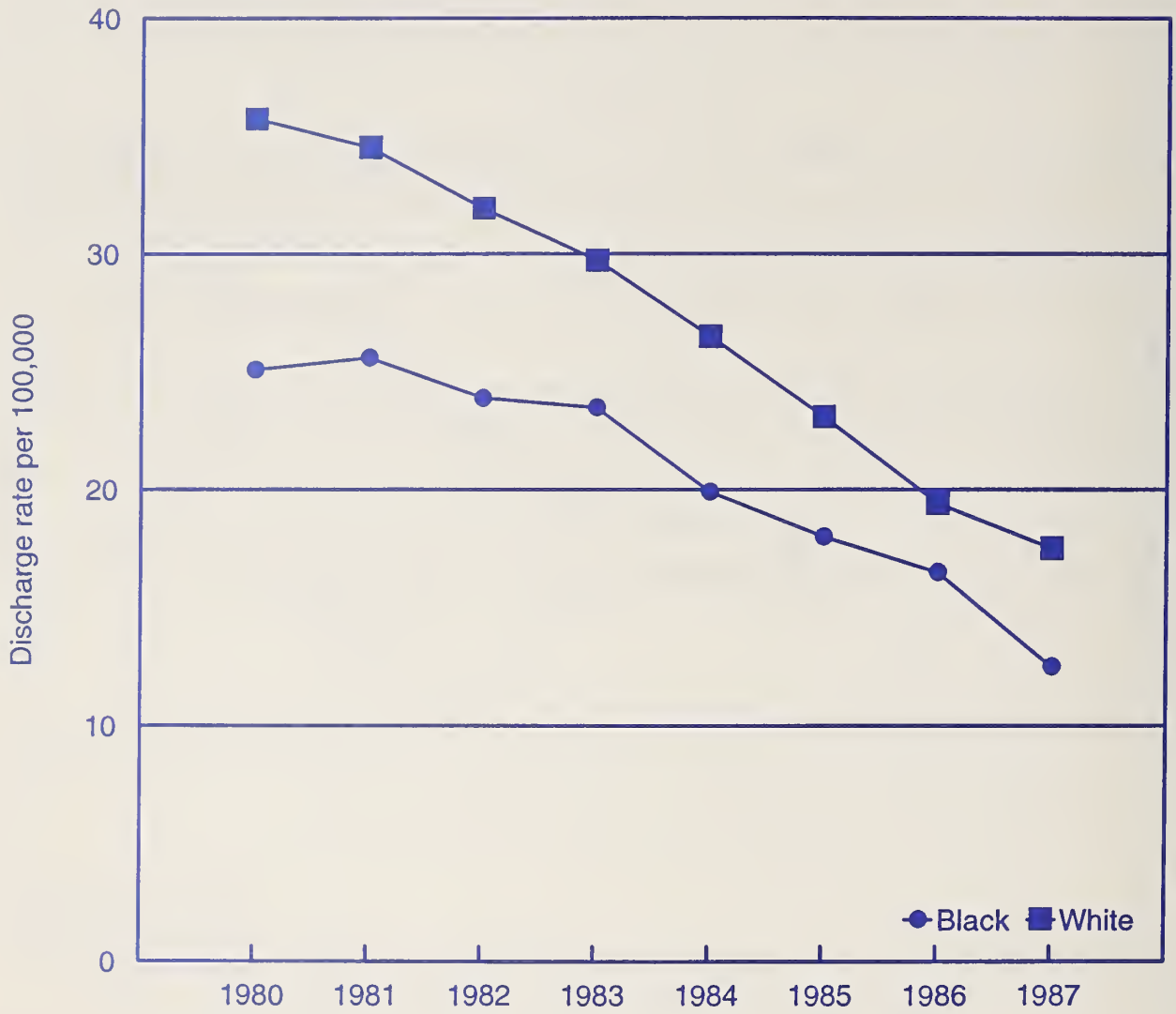
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	2.0 (0.8, 3.2)	4.1 (1.6, 6.5)	4.1 (1.1, 7.0)	3.9 (1.9, 5.9)	2.7 (1.4, 4.1)	3.5 (1.9, 5.2)	5.7 (2.6, 8.9)	4.2 (2.5, 5.9)	7.7 (–1.2, 17.3)
White	3.2 (2.6, 3.7)	4.4 (3.6, 5.2)	4.6 (3.8, 5.3)	4.8 (4.0, 5.6)	5.5 (4.7, 6.3)	6.9 (5.8, 8.1)	6.8 (5.7, 7.8)	8.3 (6.9, 9.8)	13.0 (10.4, 15.8)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

54. Other hematologic conditions



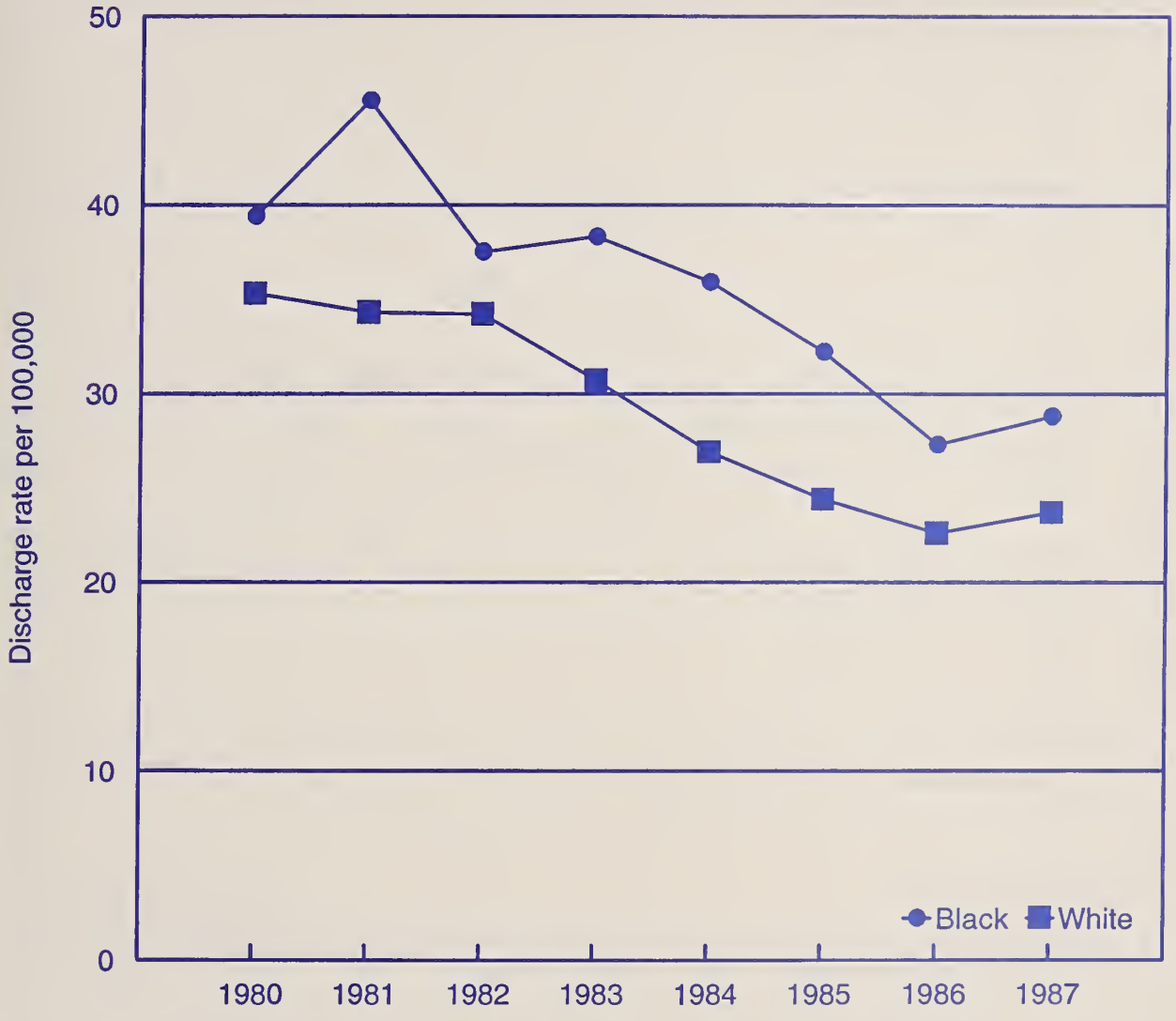
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	25.1 (17.7, 32.5)	25.6 (20.6, 30.6)	23.9 (18.4, 29.3)	23.5 (18.2, 28.7)	19.9 (15.8, 24.0)	18.0 (12.9, 23.1)	16.5 (12.2, 20.7)	12.5 (8.6, 16.4)	-9.2 (-11.7, -6.7)
White	35.7 (32.6, 38.7)	34.5 (31.3, 37.7)	31.9 (28.8, 35.1)	29.7 (27.1, 32.4)	26.5 (24.1, 28.9)	23.1 (20.8, 25.5)	19.4 (17.4, 21.4)	17.5 (15.4, 19.6)	-10.1 (-11.6, -8.6)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

55. Organic disorders and dementias



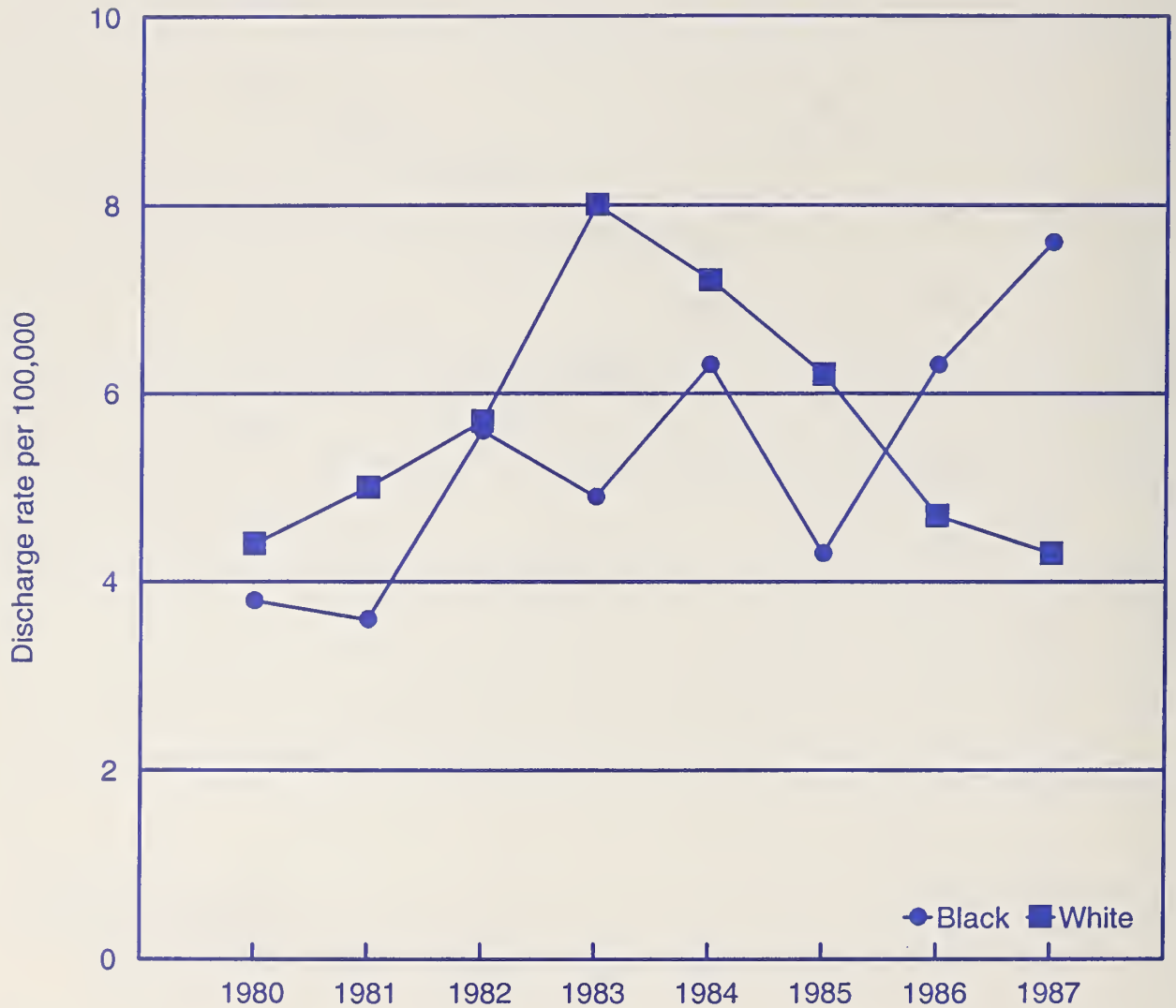
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	39.4 (30.1, 48.7)	45.5 (34.6, 56.3)	37.5 (29.0, 45.9)	38.3 (29.7, 47.0)	35.9 (27.6, 44.1)	32.2 (24.9, 39.4)	27.3 (20.7, 33.9)	28.8 (20.2, 37.4)	-6.1 (-8.3, -3.8)
White	35.3 (32.4, 38.3)	34.3 (31.3, 37.3)	34.2 (31.3, 37.0)	30.7 (28.1, 33.3)	26.9 (24.5, 29.4)	24.4 (21.9, 27.0)	22.6 (20.1, 25.1)	23.7 (20.3, 27.2)	-6.9 (-8.4, -5.3)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

56. Presenile dementia, including Alzheimer's



Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	3.8 (1.8, 5.8)	3.6 (1.7, 5.4)	5.6 (3.1, 8.0)	4.9 (2.7, 7.2)	6.3 (3.9, 8.7)	4.3 (2.4, 6.3)	6.3 (3.0, 9.6)	7.6 (1.8, 13.3)	8.9 (3.3, 14.9)
White	4.4 (3.5, 5.3)	5.0 (4.2, 5.7)	5.7 (5.0, 6.5)	8.0 (6.9, 9.0)	7.2 (6.2, 8.3)	6.2 (5.4, 7.1)	4.7 (4.0, 5.5)	4.3 (3.6, 5.1)	-0.2 (-7.5, 7.6)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

57. Alcohol-related disorders

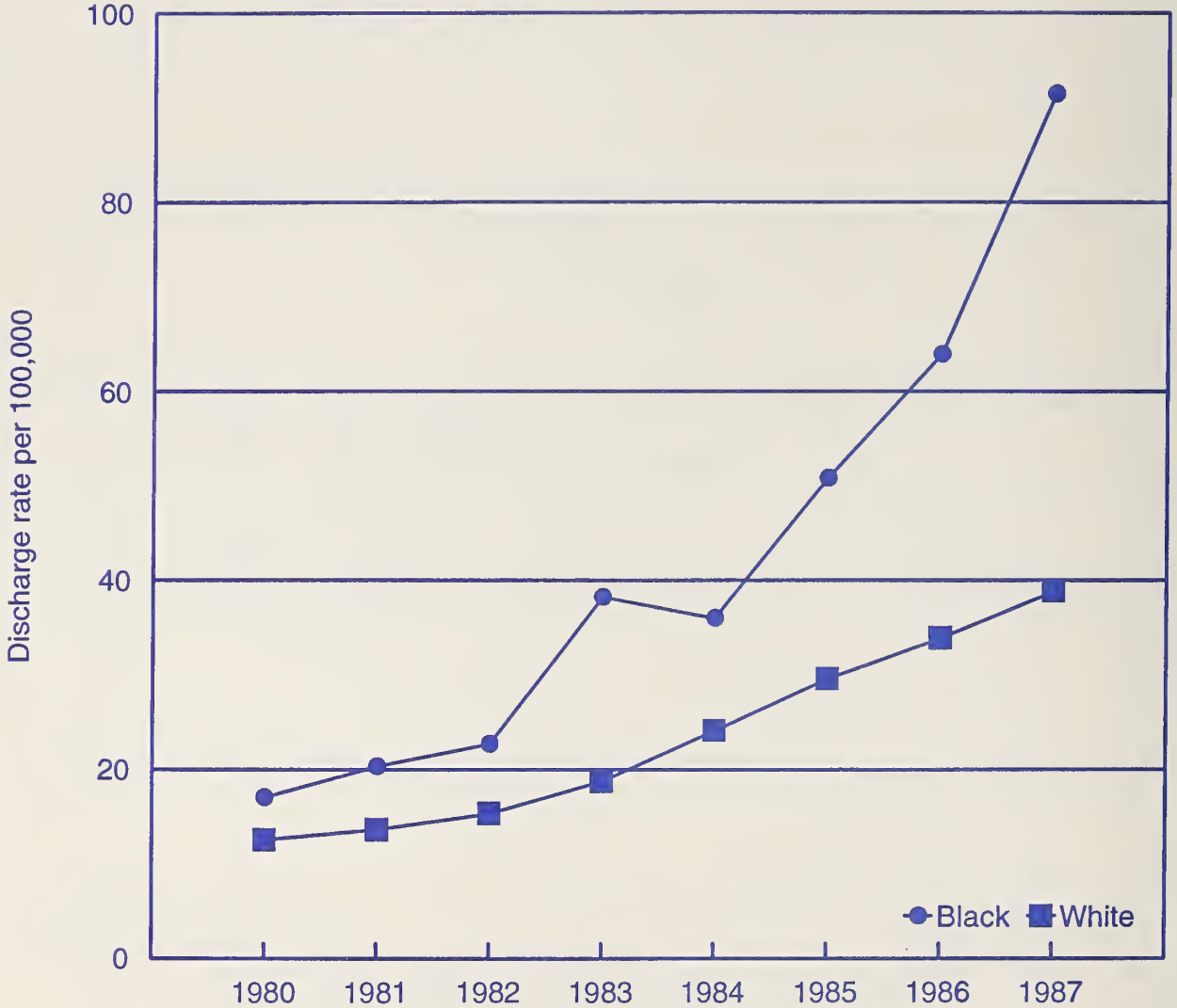
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	198.8 (144.4, 253.2)	183.1 (135.7, 230.4)	166.6 (126.8, 206.5)	179.1 (142.4, 215.8)	188.9 (150.4, 227.3)	197.6 (144.5, 250.6)	197.6 (140.4, 254.9)	197.9 (143.0, 252.8)	1.1 (–0.8, 3.0)
White	149.1 (127.2, 170.9)	148.0 (126.7, 169.3)	128.9 (111.0, 146.8)	131.3 (111.3, 151.3)	135.0 (115.2, 154.7)	136.1 (115.3, 156.8)	132.8 (114.4, 151.2)	129.7 (111.1, 148.2)	–1.6 (–2.9, –0.2)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

58. Drug disorders, not alcohol related



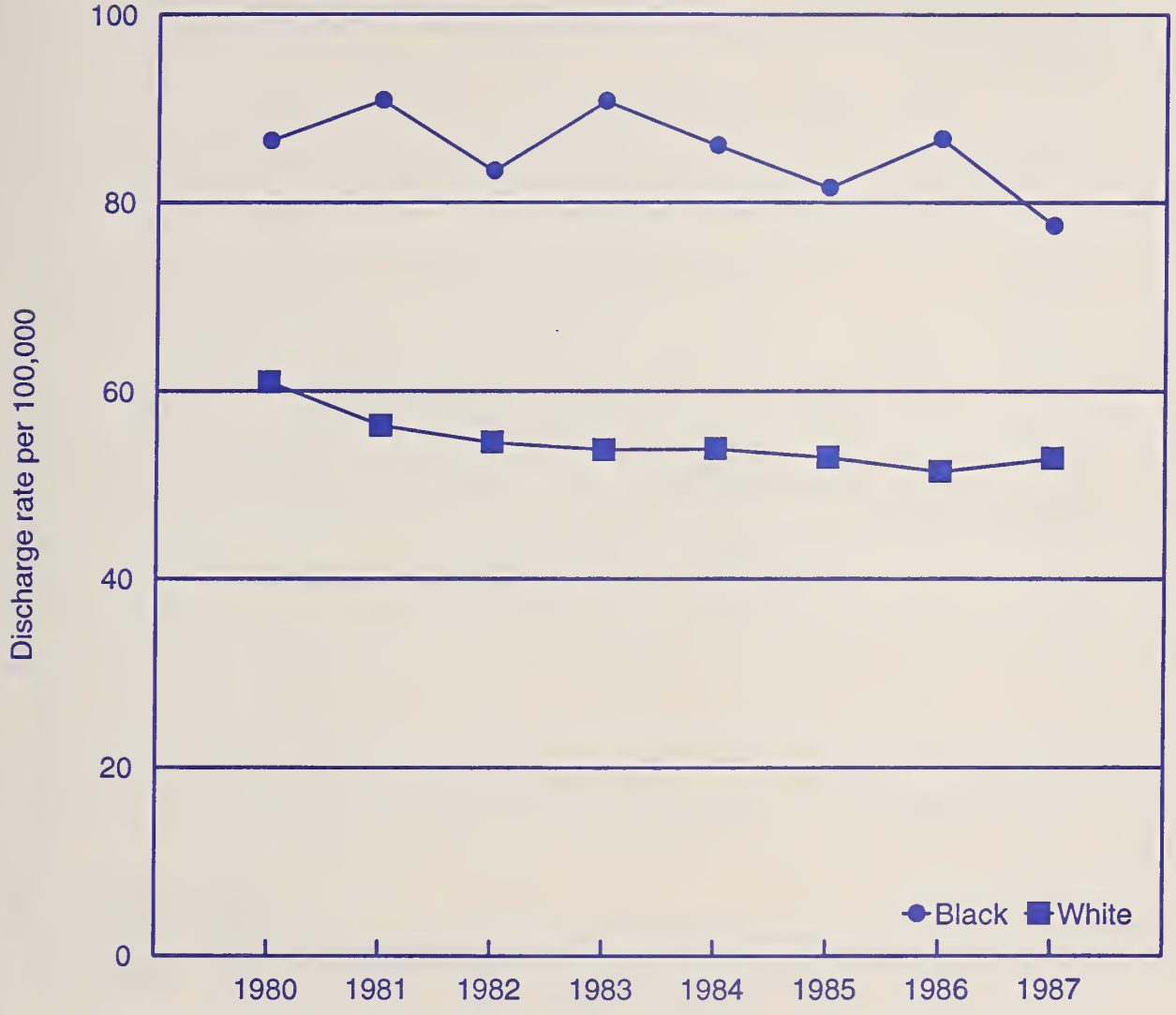
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	17.0 (7.2, 26.9)	20.3 (9.4, 31.1)	22.7 (11.3, 34.1)	38.2 (13.5, 62.8)	36.0 (17.7, 54.3)	50.8 (29.6, 72.1)	63.9 (38.4, 89.4)	91.4 (50.9, 131.8)	26.7 (22.5, 30.9)
White	12.5 (8.5, 16.5)	13.6 (9.6, 17.6)	15.3 (11.3, 19.3)	18.7 (14.1, 23.4)	24.1 (17.7, 30.5)	29.6 (22.4, 36.8)	33.9 (26.5, 41.2)	38.8 (30.1, 47.5)	19.1 (17.2, 21.2)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

59. Schizophrenic disorders



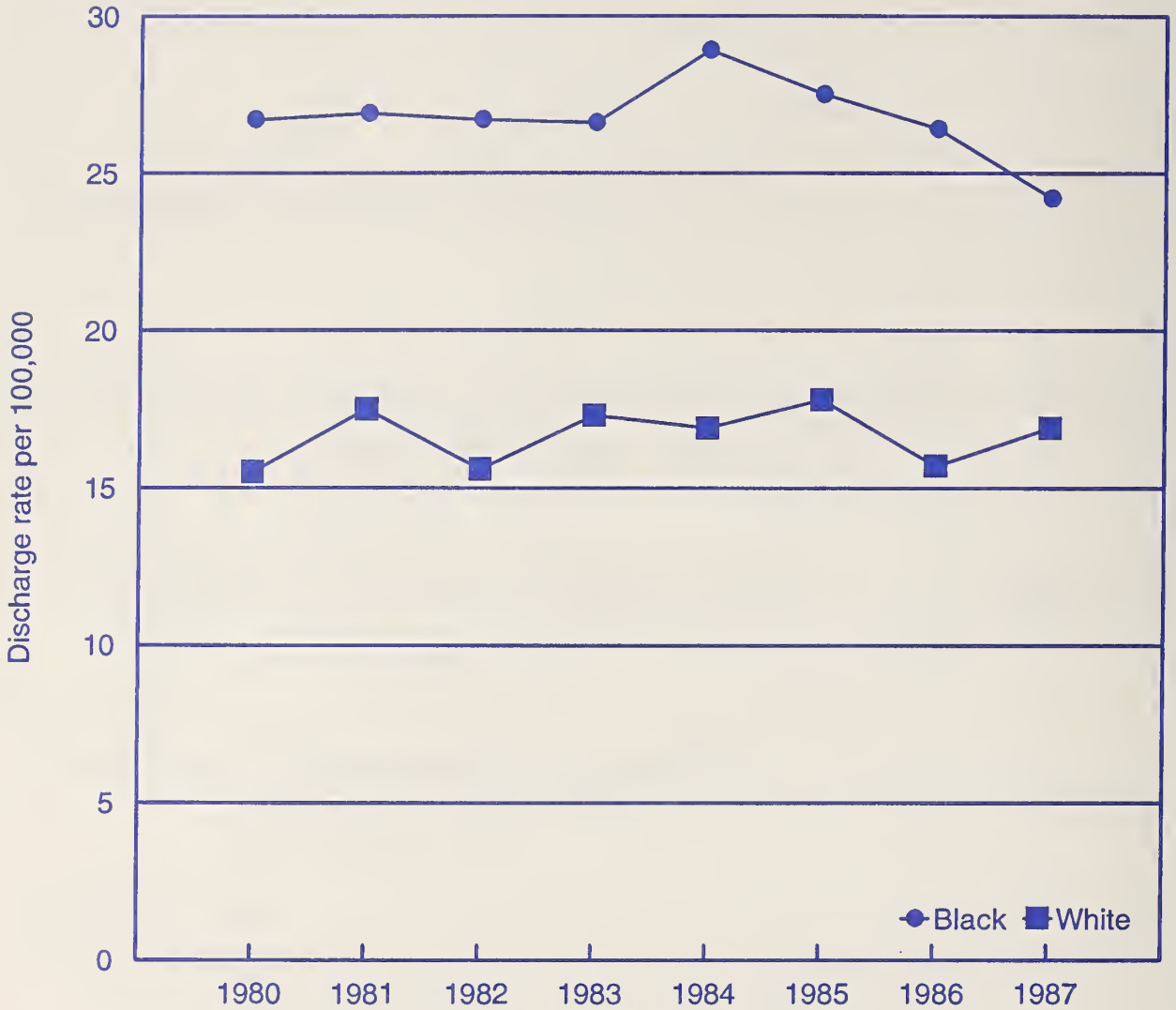
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	86.5 (63.0, 110.1)	90.8 (64.5, 117.1)	83.3 (58.2, 108.3)	90.7 (66.3, 115.1)	86.0 (62.3, 109.6)	81.5 (55.5, 107.5)	86.7 (58.9, 114.5)	77.5 (54.1, 100.9)	-1.3 (-2.7, 0.0)
White	60.9 (45.0, 76.8)	56.3 (41.0, 71.6)	54.5 (41.7, 67.3)	53.7 (39.9, 67.5)	53.8 (40.7, 67.0)	52.9 (42.5, 63.4)	51.4 (41.0, 61.8)	52.8 (40.9, 64.8)	-1.8 (-2.7, -0.9)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

60. Other psychoses



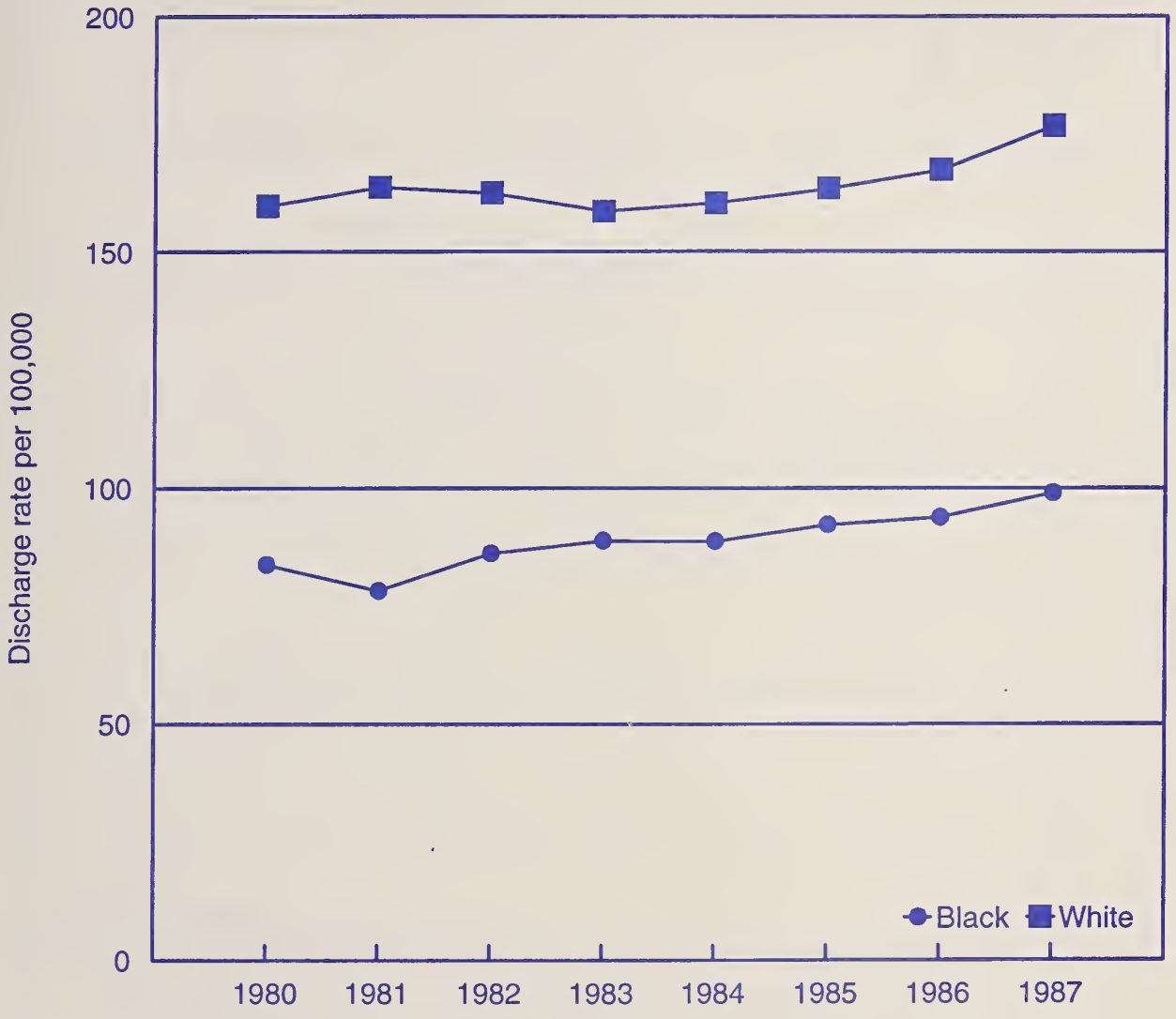
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	26.7 (18.7, 34.7)	26.9 (19.8, 34.0)	26.7 (19.6, 33.8)	26.6 (19.3, 33.9)	28.9 (20.5, 37.2)	27.5 (21.0, 34.0)	26.4 (19.8, 33.0)	24.2 (17.4, 31.1)	-0.7 (-2.2, 0.8)
White	15.5 (13.5, 17.6)	17.5 (15.5, 19.6)	15.6 (13.6, 17.5)	17.3 (15.2, 19.5)	16.9 (14.6, 19.2)	17.8 (15.1, 20.6)	15.7 (13.4, 18.1)	16.9 (14.1, 19.6)	0.5 (-1.3, 2.3)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

61. Depression and affective disorders



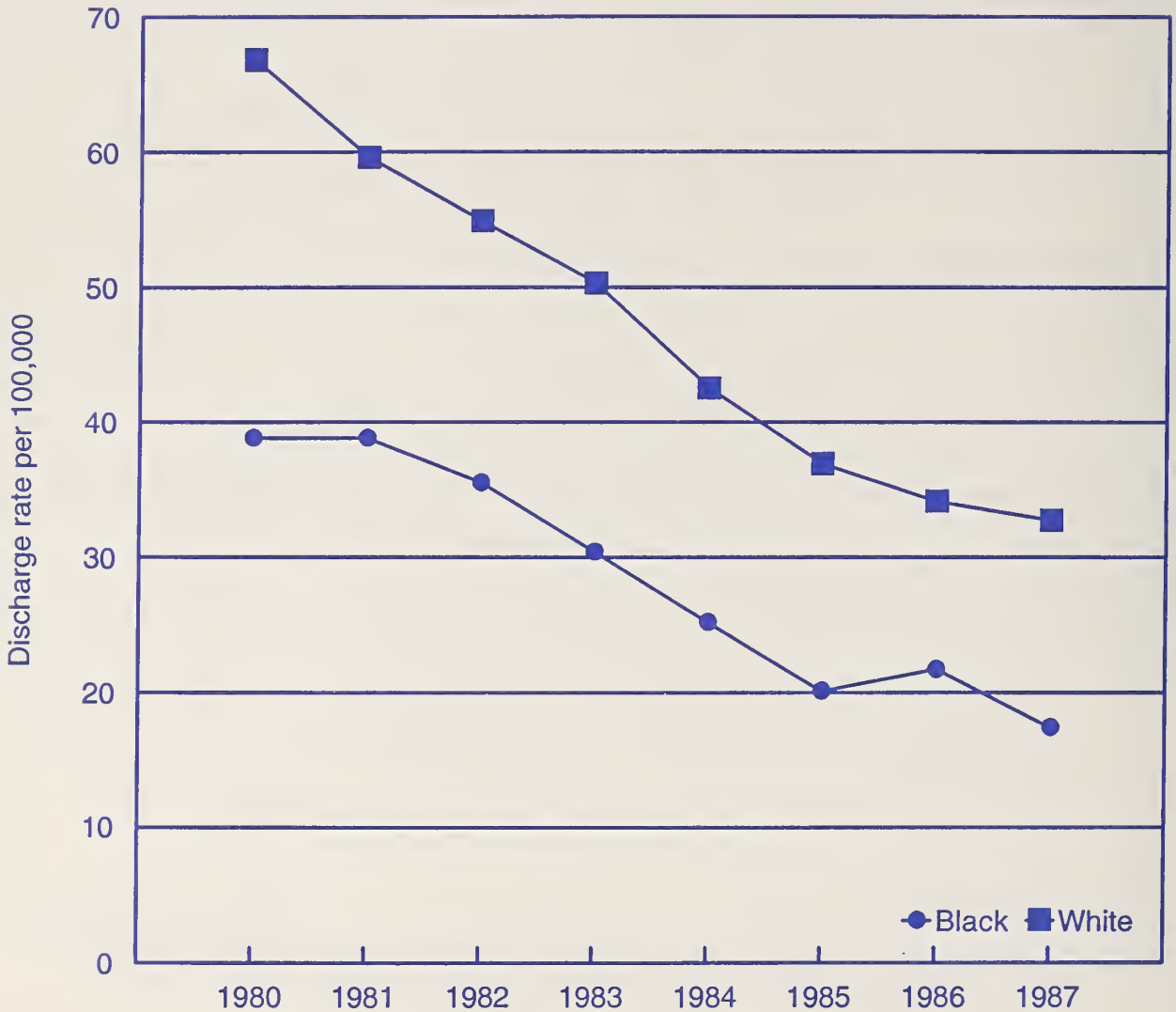
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	83.6 (65.1, 102.1)	78.0 (62.1, 94.0)	86.0 (68.9, 103.0)	88.7 (70.1, 107.3)	88.6 (71.6, 105.6)	92.1 (71.6, 112.6)	93.7 (69.7, 117.6)	98.9 (75.2, 122.6)	2.8 (1.8, 3.7)
White	159.6 (141.1, 178.1)	163.6 (145.0, 182.2)	162.4 (143.4, 181.4)	158.4 (140.3, 176.6)	160.2 (140.4, 180.1)	163.3 (142.5, 184.0)	167.3 (145.6, 189.0)	176.7 (151.5, 201.9)	1.0 (0.2, 1.8)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

62. Anxiety and personality disorders



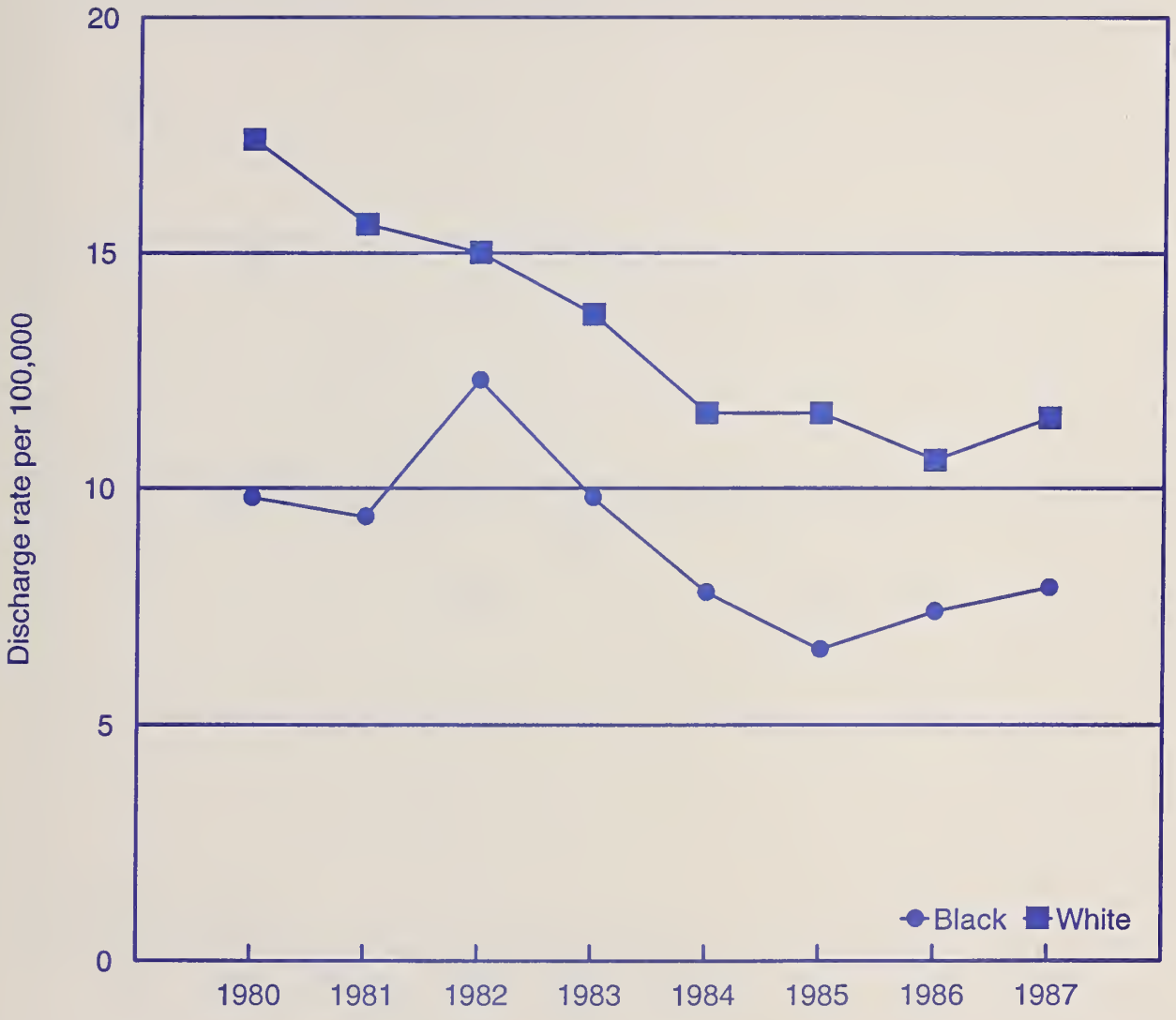
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	38.8 (31.2, 46.4)	38.8 (32.0, 45.6)	35.5 (28.1, 43.0)	30.4 (24.2, 36.7)	25.2 (19.5, 30.9)	20.1 (15.7, 24.5)	21.7 (16.4, 27.0)	17.4 (12.2, 22.6)	-11.7 (-13.8, -9.5)
White	66.8 (60.2, 73.5)	59.6 (54.4, 64.7)	54.9 (49.9, 59.9)	50.3 (46.0, 54.5)	42.5 (38.7, 46.2)	36.9 (33.0, 40.8)	34.1 (30.2, 38.0)	32.7 (28.1, 37.2)	-10.3 (-11.3, -9.4)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

63. Eating disorders and obesity



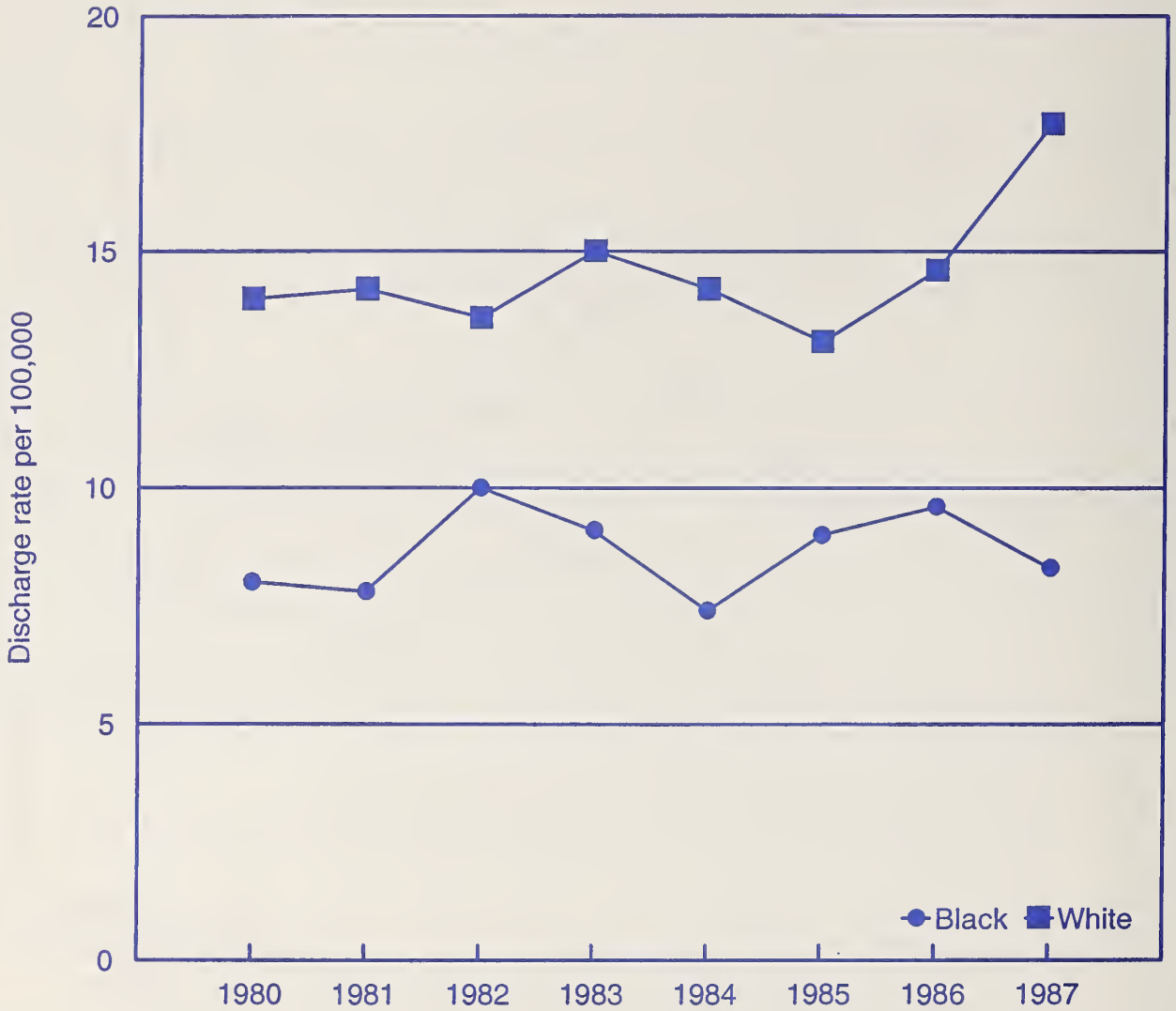
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	9.8 (6.7, 12.9)	9.4 (6.2, 12.7)	12.3 (9.1, 15.4)	9.8 (6.9, 12.7)	7.8 (5.5, 10.1)	6.6 (3.6, 9.6)	7.4 (3.4, 11.5)	7.9 (4.5, 11.2)	-5.6 (-9.8, -1.2)
White	17.4 (13.8, 20.9)	15.6 (13.0, 18.3)	15.0 (12.5, 17.4)	13.7 (11.4, 15.9)	11.6 (9.8, 13.4)	11.6 (9.5, 13.7)	10.6 (8.2, 12.9)	11.5 (8.5, 14.5)	-6.6 (-8.4, -4.8)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

64. Adjustment reaction



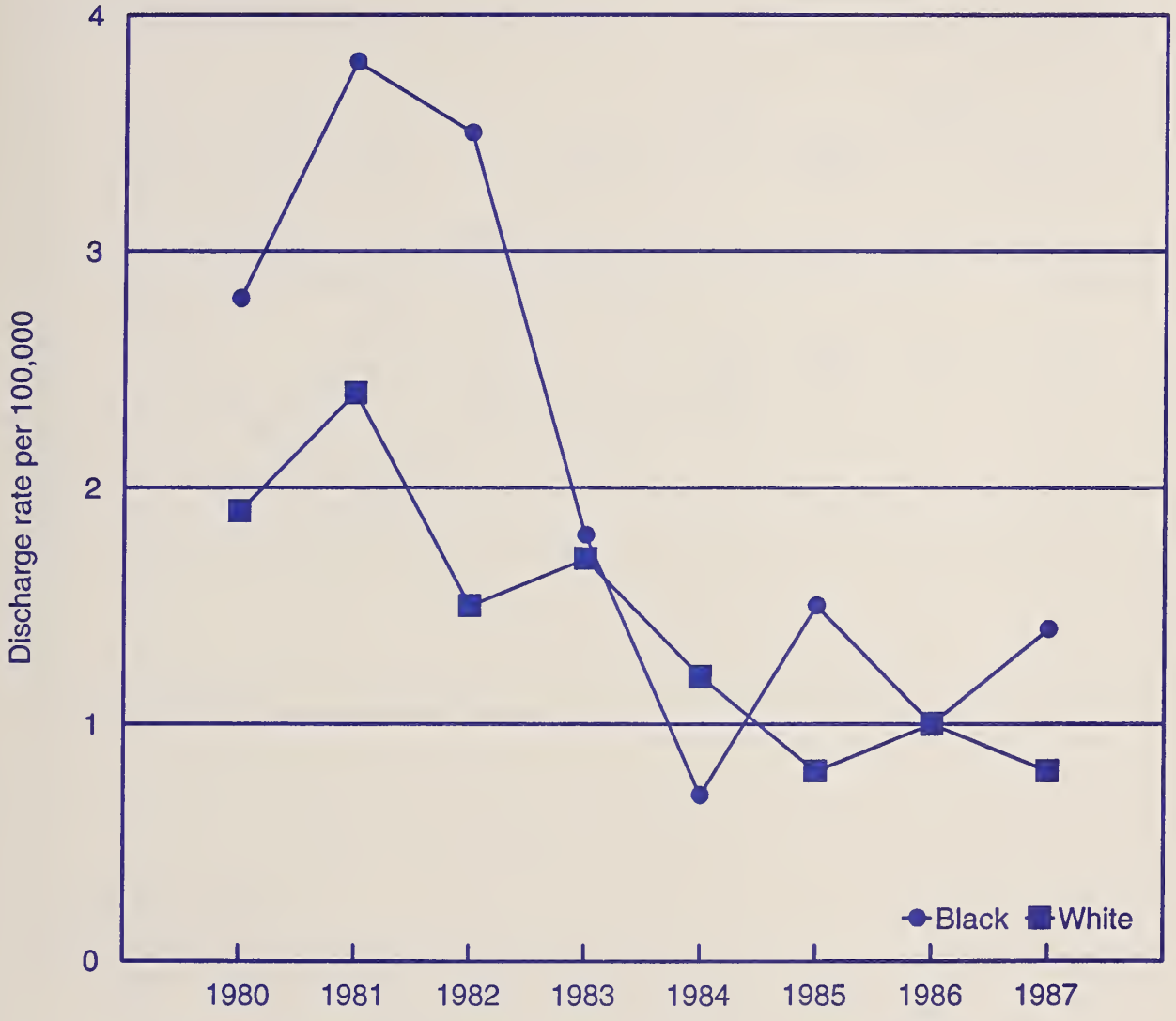
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	8.0 (4.8, 11.1)	7.8 (5.2, 10.3)	10.0 (6.7, 13.4)	9.1 (6.3, 11.9)	7.4 (4.8, 10.0)	9.0 (5.3, 12.7)	9.6 (5.2, 14.0)	8.3 (4.4, 12.1)	0.9 (–2.5, 4.5)
White	14.0 (11.2, 16.7)	14.2 (11.3, 17.2)	13.6 (10.9, 16.4)	15.0 (11.8, 18.2)	14.2 (11.2, 17.3)	13.1 (10.6, 15.6)	14.6 (11.4, 17.8)	17.7 (13.3, 22.1)	1.9 (–0.6, 4.5)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

65. Developmental disorders



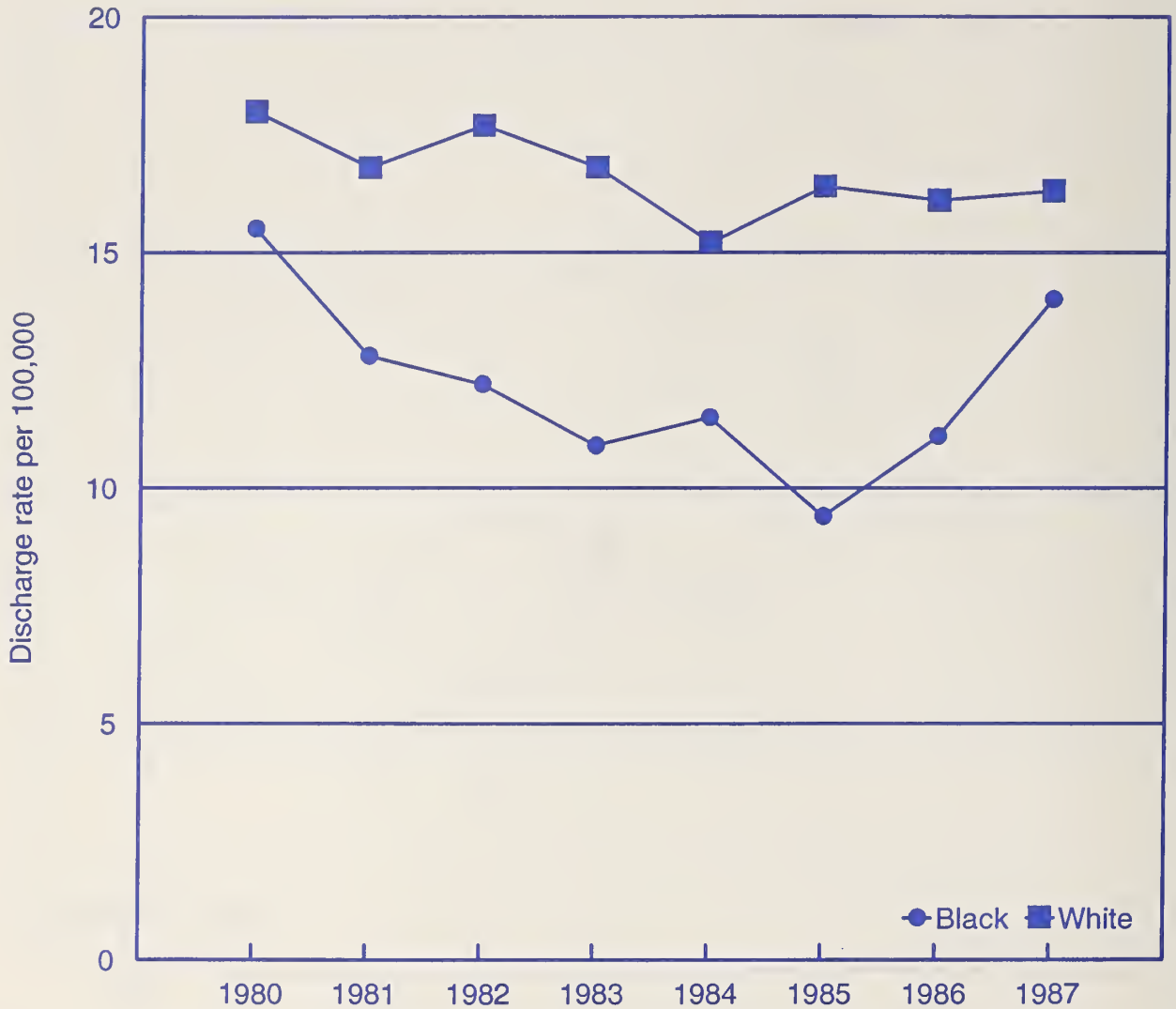
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	2.8 (1.4, 4.2)	3.8 (1.5, 6.1)	3.5 (1.9, 5.1)	1.8 (0.9, 2.8)	0.7 (0.1, 1.3)	1.5 (0.6, 2.5)	1.0 (0.3, 1.6)	1.4 (0.4, 2.3)	-16.6 (-26.9, -4.8)
White	1.9 (1.4, 2.4)	2.4 (1.7, 3.1)	1.5 (1.1, 1.9)	1.7 (1.2, 2.2)	1.2 (0.8, 1.6)	0.8 (0.5, 1.1)	1.0 (0.5, 1.4)	0.8 (0.4, 1.1)	-14.4 (-19.0, -9.5)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

66. Other mental disorders (not psychoses)



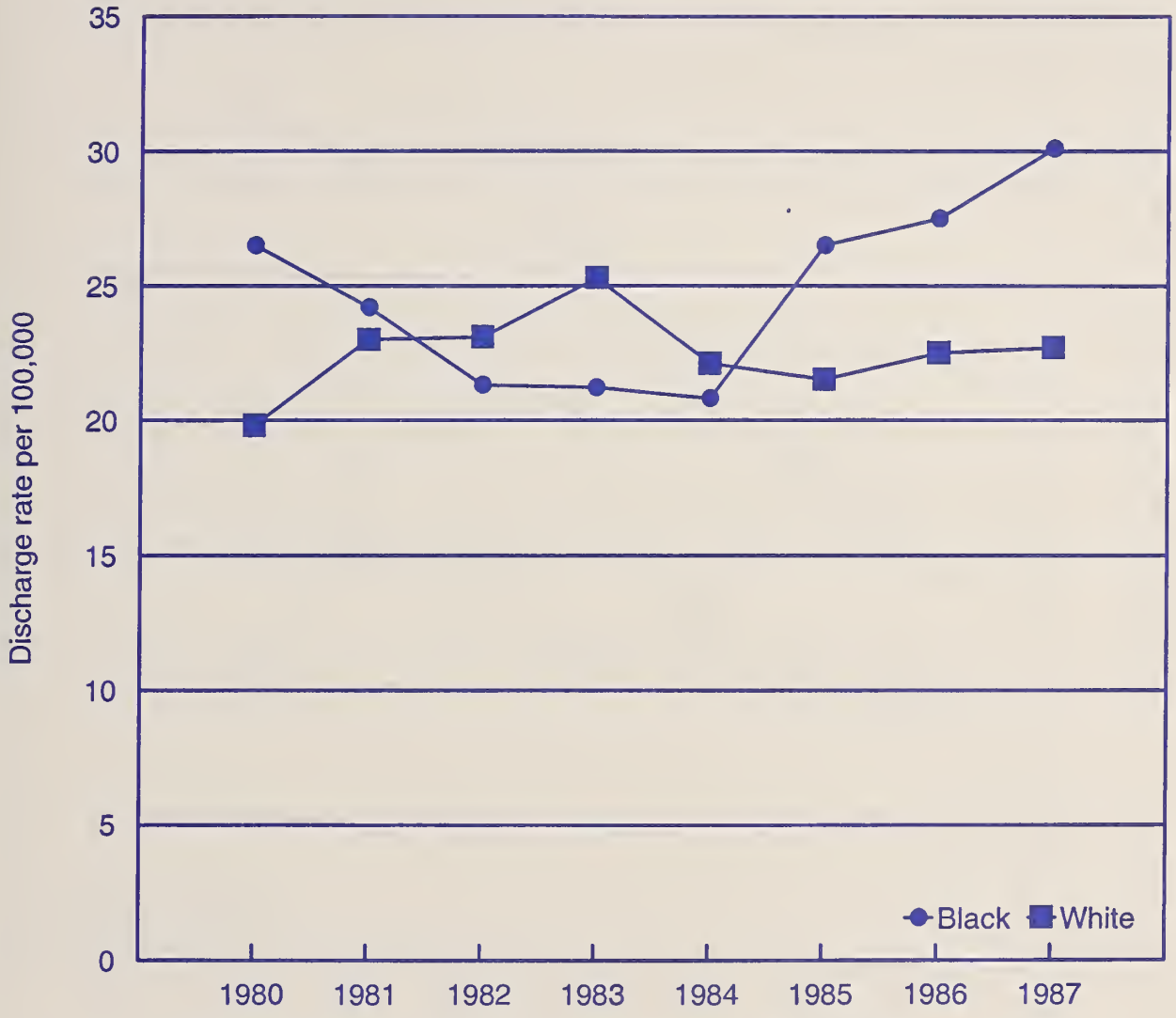
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	15.5 (11.5, 19.5)	12.8 (8.8, 16.8)	12.2 (8.5, 15.9)	10.9 (7.5, 14.2)	11.5 (7.8, 15.3)	9.4 (5.4, 13.4)	11.1 (7.5, 14.8)	14.0 (9.0, 19.0)	-2.5 (-6.9, 2.2)
White	18.0 (15.9, 20.1)	16.8 (14.7, 19.0)	17.7 (14.7, 20.7)	16.8 (13.9, 19.7)	15.2 (11.8, 18.6)	16.4 (11.4, 21.3)	16.1 (12.7, 19.5)	16.3 (13.0, 19.6)	-1.5 (-2.7, -0.2)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

67. Central nervous system infection



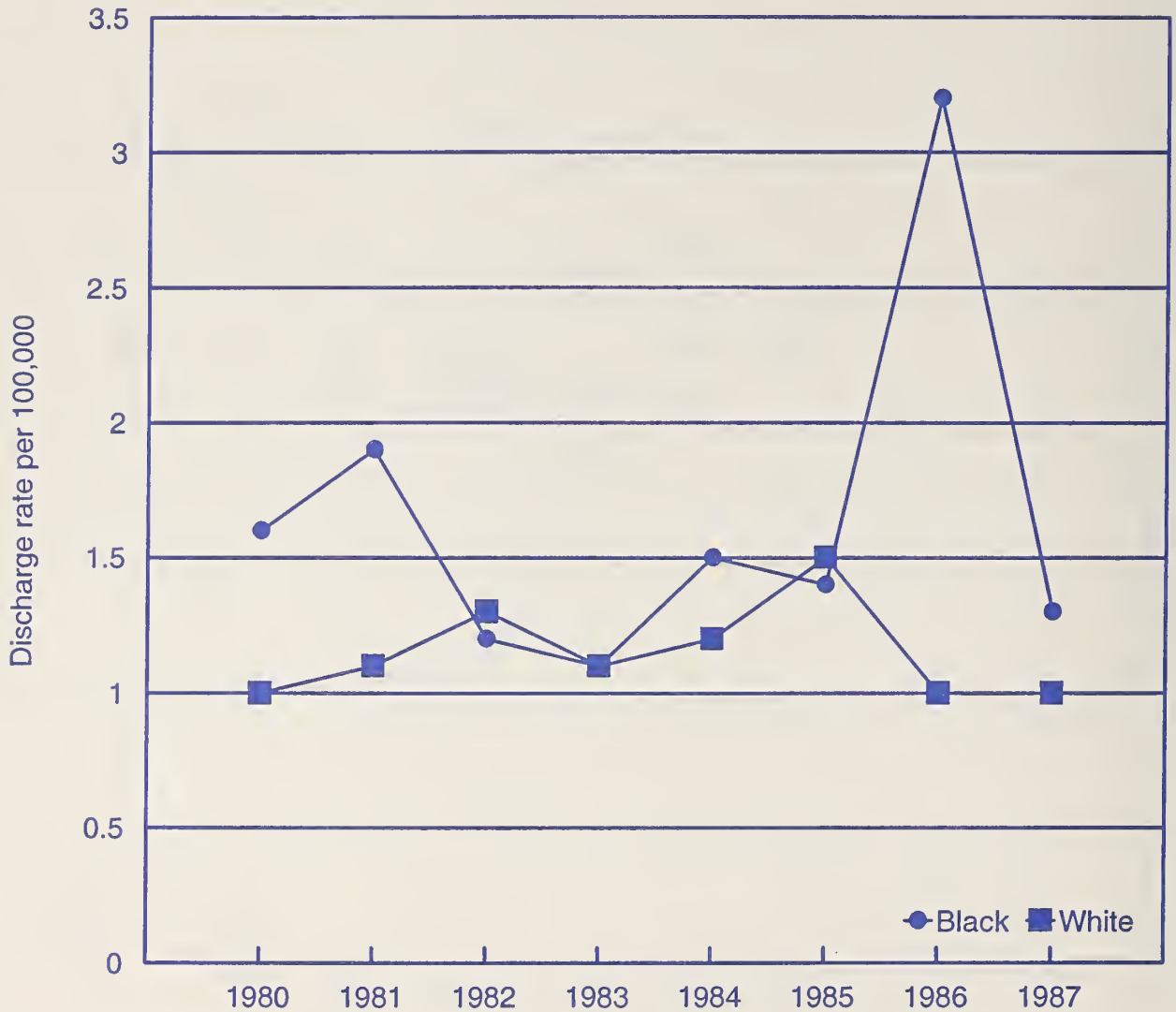
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	26.5 (19.5, 33.5)	24.2 (19.1, 29.3)	21.3 (16.1, 26.6)	21.2 (16.9, 25.5)	20.8 (16.1, 25.6)	26.5 (19.9, 33.2)	27.5 (21.3, 33.7)	30.1 (21.6, 38.7)	2.6 (–1.4, 6.9)
White	19.8 (17.5, 22.2)	23.0 (20.4, 25.6)	23.1 (20.2, 25.9)	25.3 (22.5, 28.1)	22.1 (19.9, 24.4)	21.5 (19.3, 23.8)	22.5 (19.9, 25.0)	22.7 (20.2, 25.2)	0.6 (–1.6, 2.8)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

68. Other inflammatory diseases of the central nervous system



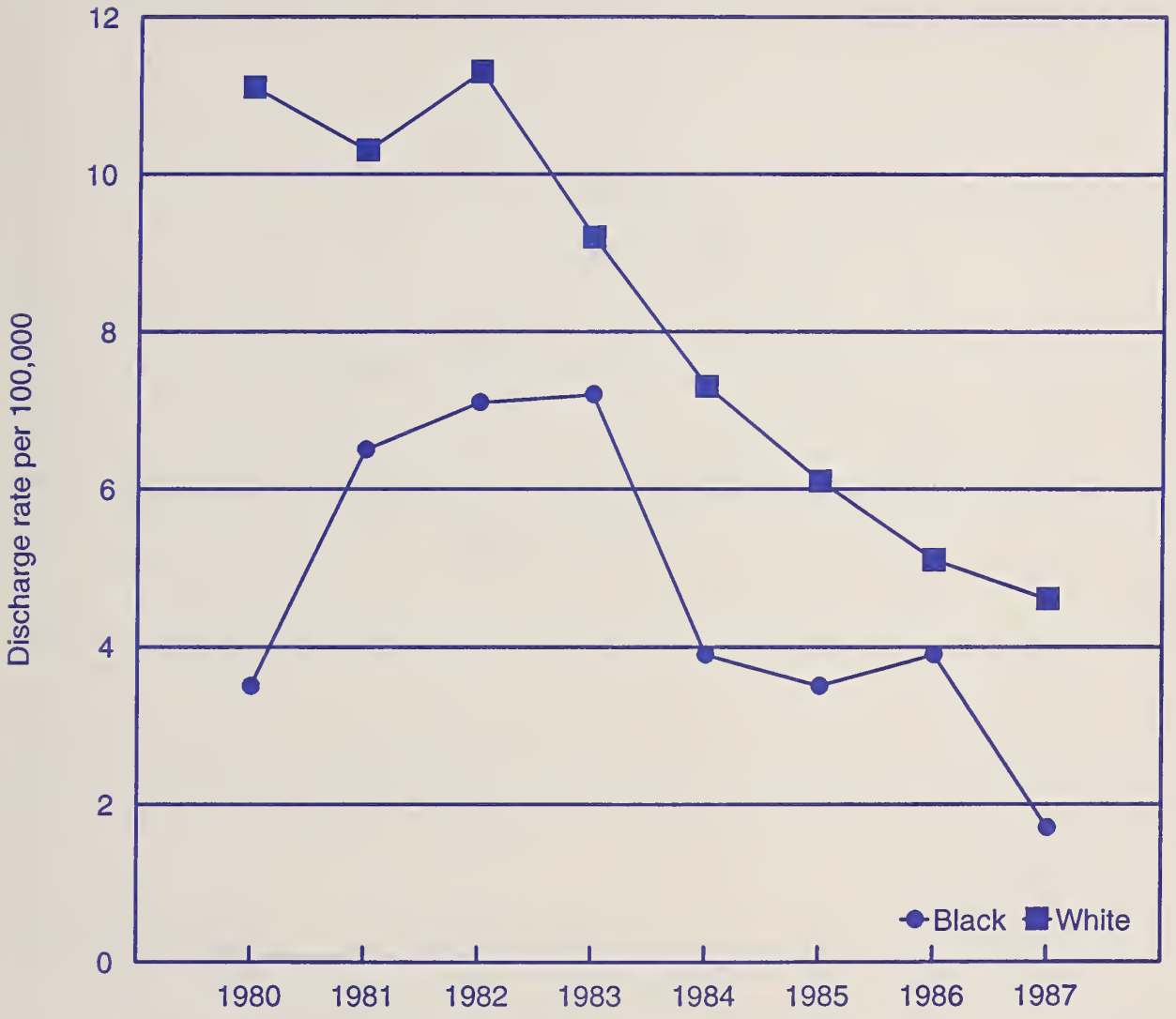
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	1.6 (0.3, 2.8)	1.9 (0.7, 3.2)	1.2 (0.4, 2.0)	1.1 (0.3, 1.8)	1.5 (0.6, 2.3)	1.4 (0.4, 2.5)	3.2 (1.5, 5.0)	1.3 (0.6, 2.1)	2.9 (–7.7, 14.8)
White	1.0 (0.7, 1.3)	1.1 (0.8, 1.4)	1.3 (1.0, 1.7)	1.1 (0.8, 1.5)	1.2 (0.9, 1.5)	1.5 (1.1, 1.9)	1.0 (0.7, 1.3)	1.0 (0.7, 1.4)	0.3 (–4.4, 5.2)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

69. Parkinson's disease



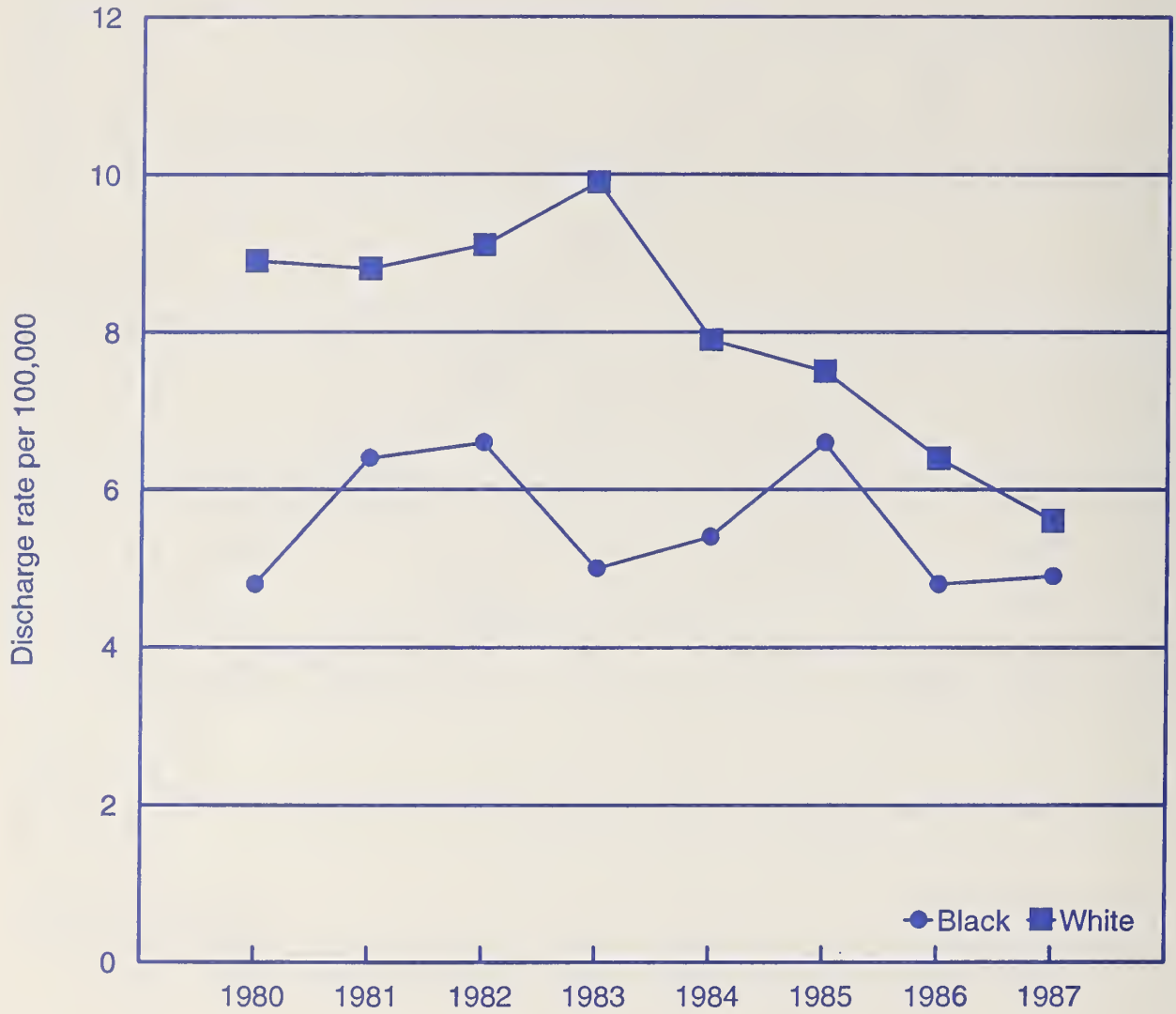
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	3.5 (1.8, 5.3)	6.5 (3.7, 9.2)	7.1 (4.8, 9.4)	7.2 (4.1, 10.3)	3.9 (2.4, 5.5)	3.5 (1.8, 5.2)	3.9 (1.3, 6.5)	1.7 (0.5, 2.9)	-11.6 (-21.8, 0.0)
White	11.1 (9.5, 12.7)	10.3 (9.1, 11.6)	11.3 (10.1, 12.4)	9.2 (8.1, 10.2)	7.3 (6.4, 8.2)	6.1 (5.2, 6.9)	5.1 (4.4, 5.9)	4.6 (3.9, 5.3)	-13.1 (-15.7, -10.3)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

70. Multiple sclerosis



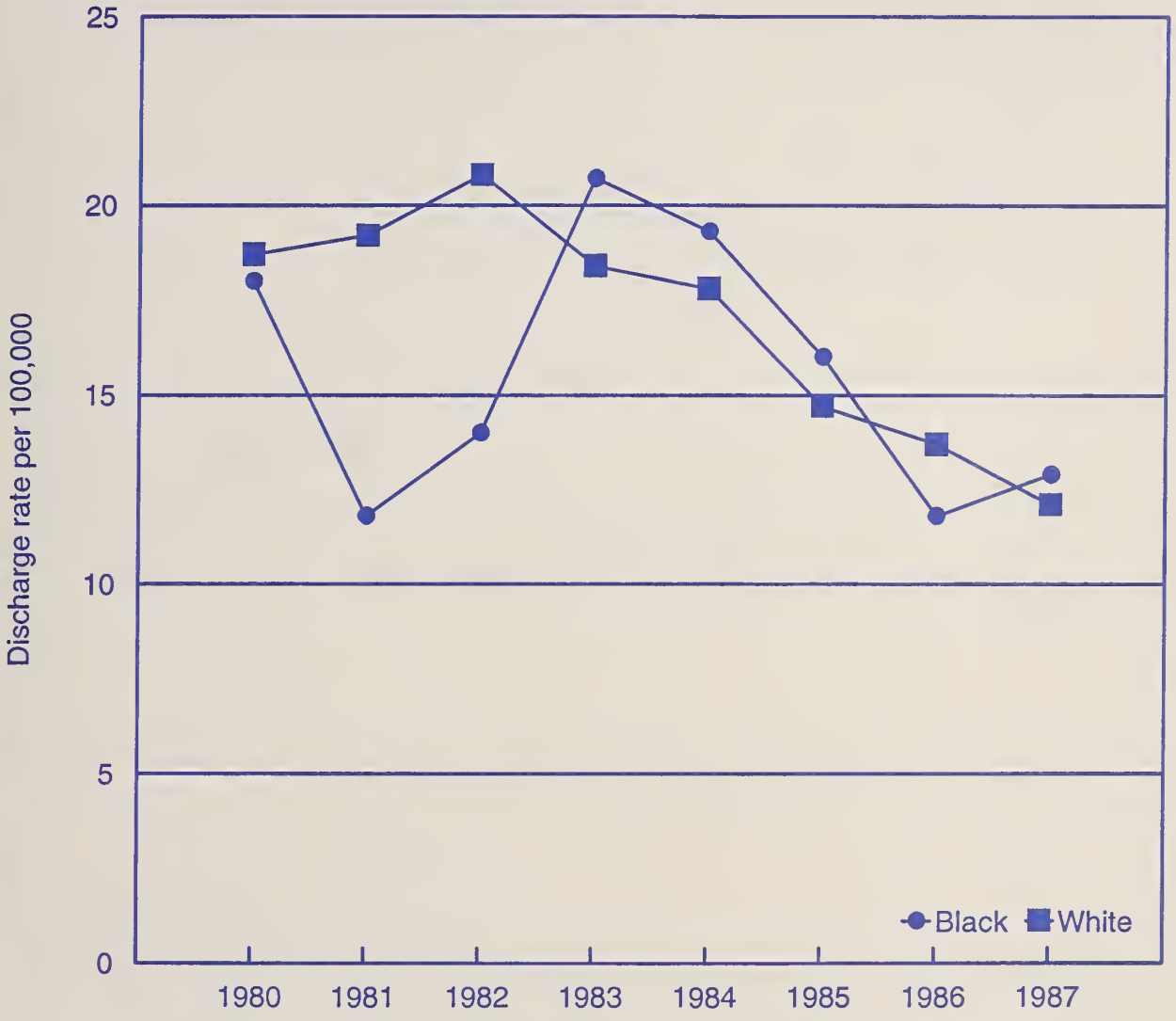
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	4.8 (2.6, 6.9)	6.4 (3.9, 8.8)	6.6 (4.1, 9.0)	5.0 (3.0, 7.0)	5.4 (2.9, 7.8)	6.6 (3.9, 9.3)	4.8 (3.1, 6.5)	4.9 (2.8, 7.0)	-1.3 (-5.8, 3.4)
White	8.9 (7.6, 10.3)	8.8 (7.6, 9.9)	9.1 (7.7, 10.5)	9.9 (8.4, 11.4)	7.9 (6.7, 9.1)	7.5 (6.4, 8.6)	6.4 (5.2, 7.6)	5.6 (4.6, 6.5)	-6.5 (-9.6, -3.3)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

71. Other hereditary and degenerative central nervous system diseases



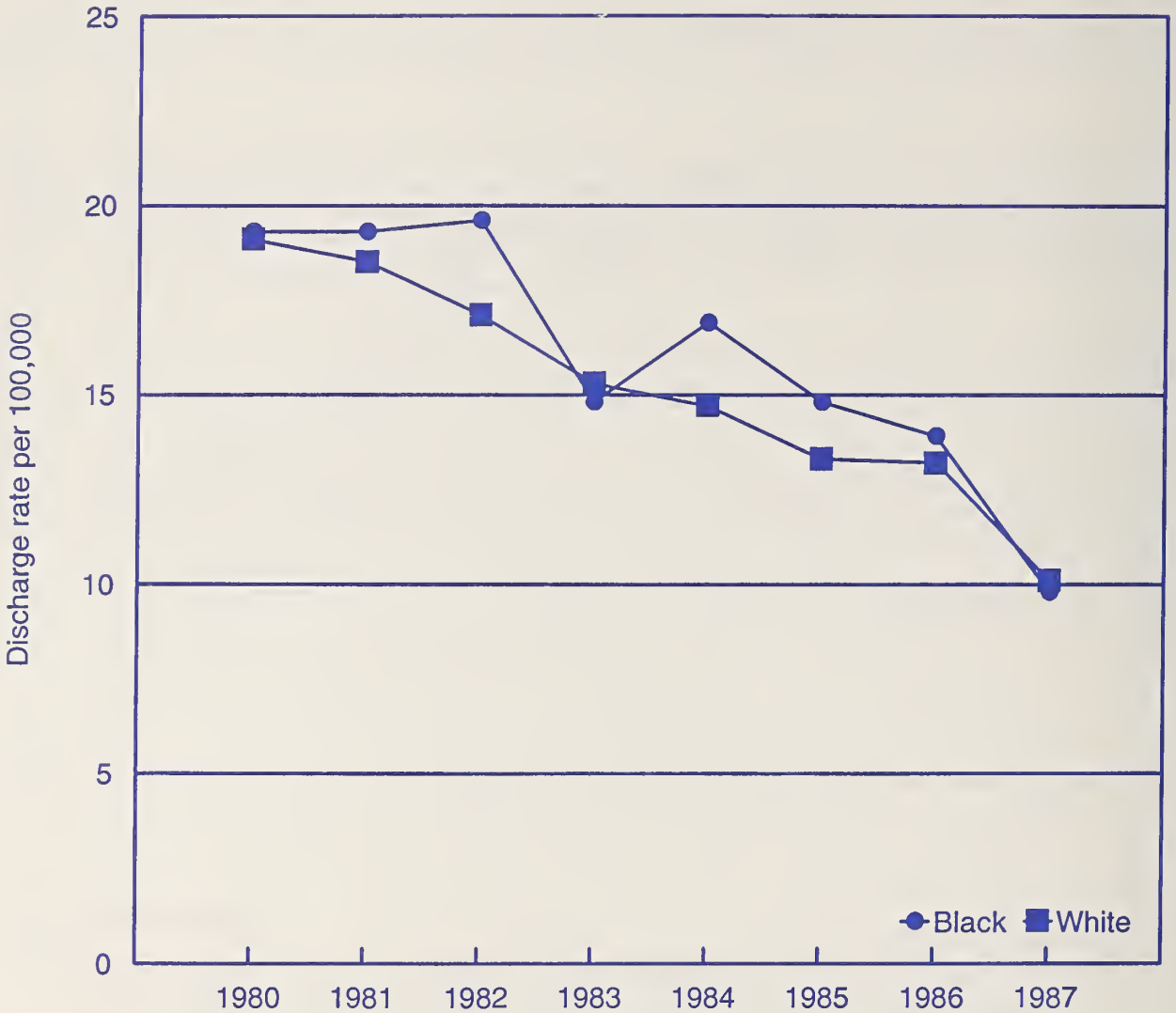
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	18.0 (13.7, 22.2)	11.8 (8.3, 15.3)	14.0 (10.1, 17.9)	20.7 (15.3, 26.0)	19.3 (14.5, 24.1)	16.0 (11.9, 20.0)	11.8 (8.1, 15.5)	12.9 (8.8, 17.0)	-2.3 (-8.9, 4.7)
White	18.7 (16.8, 20.6)	19.2 (17.0, 21.4)	20.8 (18.6, 23.1)	18.4 (16.6, 20.2)	17.8 (15.8, 19.9)	14.7 (12.9, 16.6)	13.7 (12.0, 15.4)	12.1 (10.3, 14.0)	-6.6 (-9.2, -4.0)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

72. Paralysis



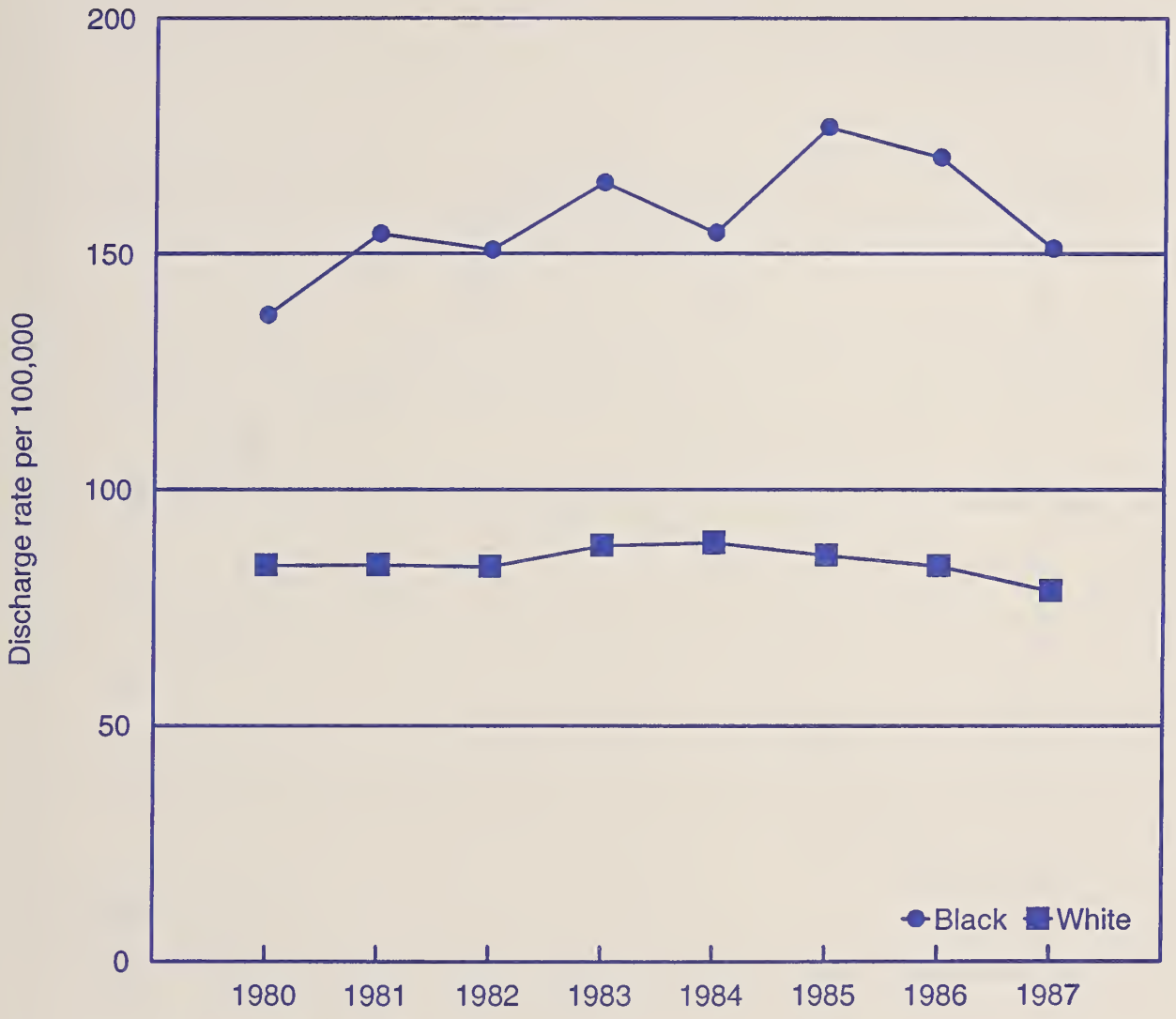
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	19.3 (14.9, 23.6)	19.3 (14.9, 23.6)	19.6 (14.6, 24.6)	14.8 (10.6, 19.0)	16.9 (11.1, 22.6)	14.8 (9.3, 20.3)	13.9 (5.0, 22.9)	9.8 (5.3, 14.3)	-8.1 (-11.3, -4.7)
White	19.1 (15.8, 22.3)	18.5 (15.2, 21.7)	17.1 (13.7, 20.4)	15.3 (12.5, 18.1)	14.7 (11.9, 17.6)	13.3 (9.7, 16.9)	13.2 (9.1, 17.3)	10.1 (6.2, 13.9)	-7.9 (-9.6, -6.2)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

73. Epilepsy, convulsions



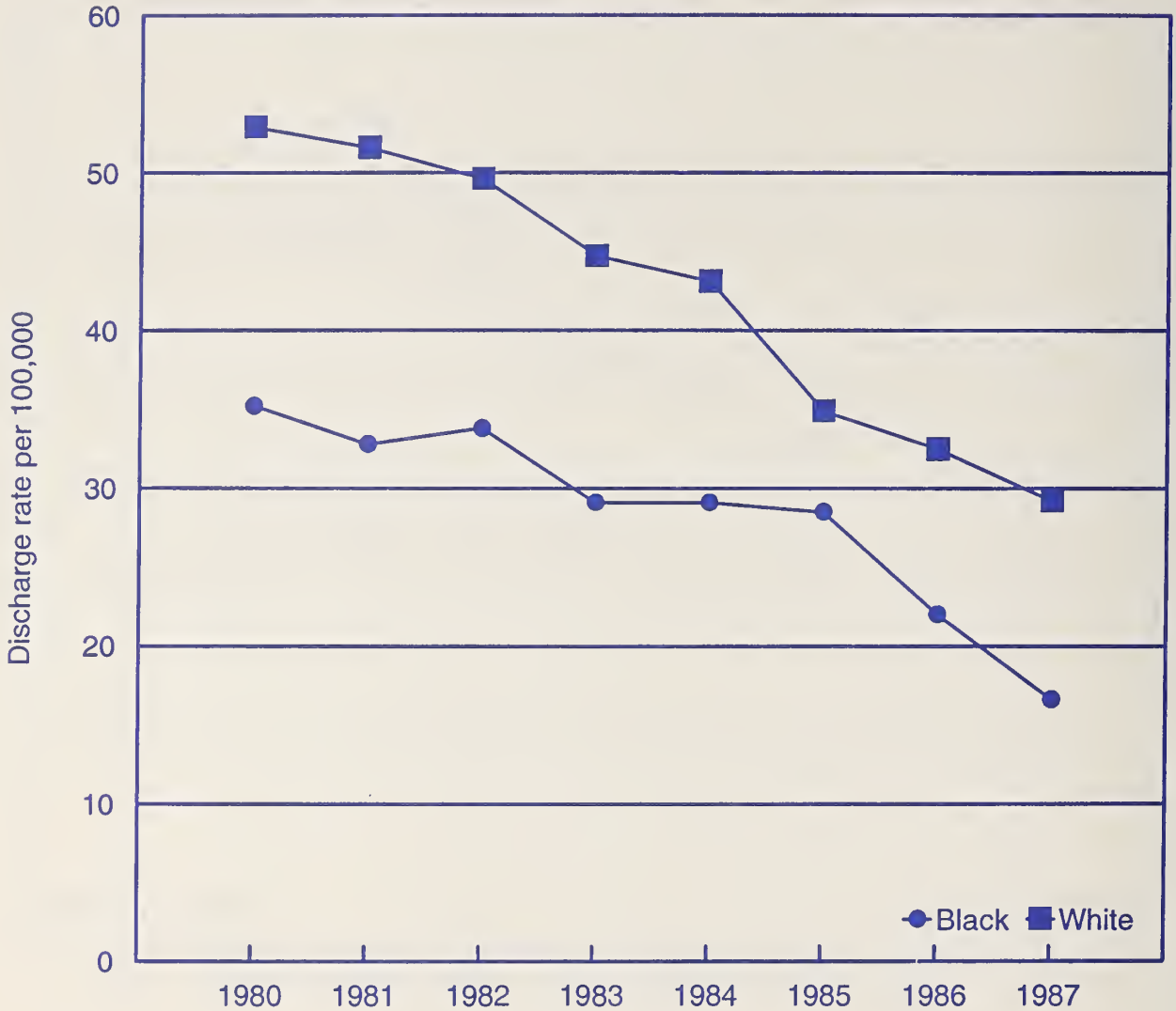
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	136.9 (109.9, 163.9)	154.1 (124.8, 183.4)	150.7 (124.6, 176.9)	165.0 (134.5, 195.5)	154.3 (126.9, 181.7)	176.8 (144.5, 209.1)	170.4 (137.0, 203.8)	151.0 (123.3, 178.7)	1.9 (–0.3, 4.1)
White	83.9 (78.0, 89.7)	84.0 (78.3, 89.7)	83.7 (78.8, 88.6)	88.1 (82.2, 94.0)	88.7 (82.8, 94.6)	86.1 (80.2, 92.0)	83.8 (78.0, 89.6)	78.5 (73.2, 83.9)	–0.4 (–1.6, 0.7)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

74. Headache, including migraine



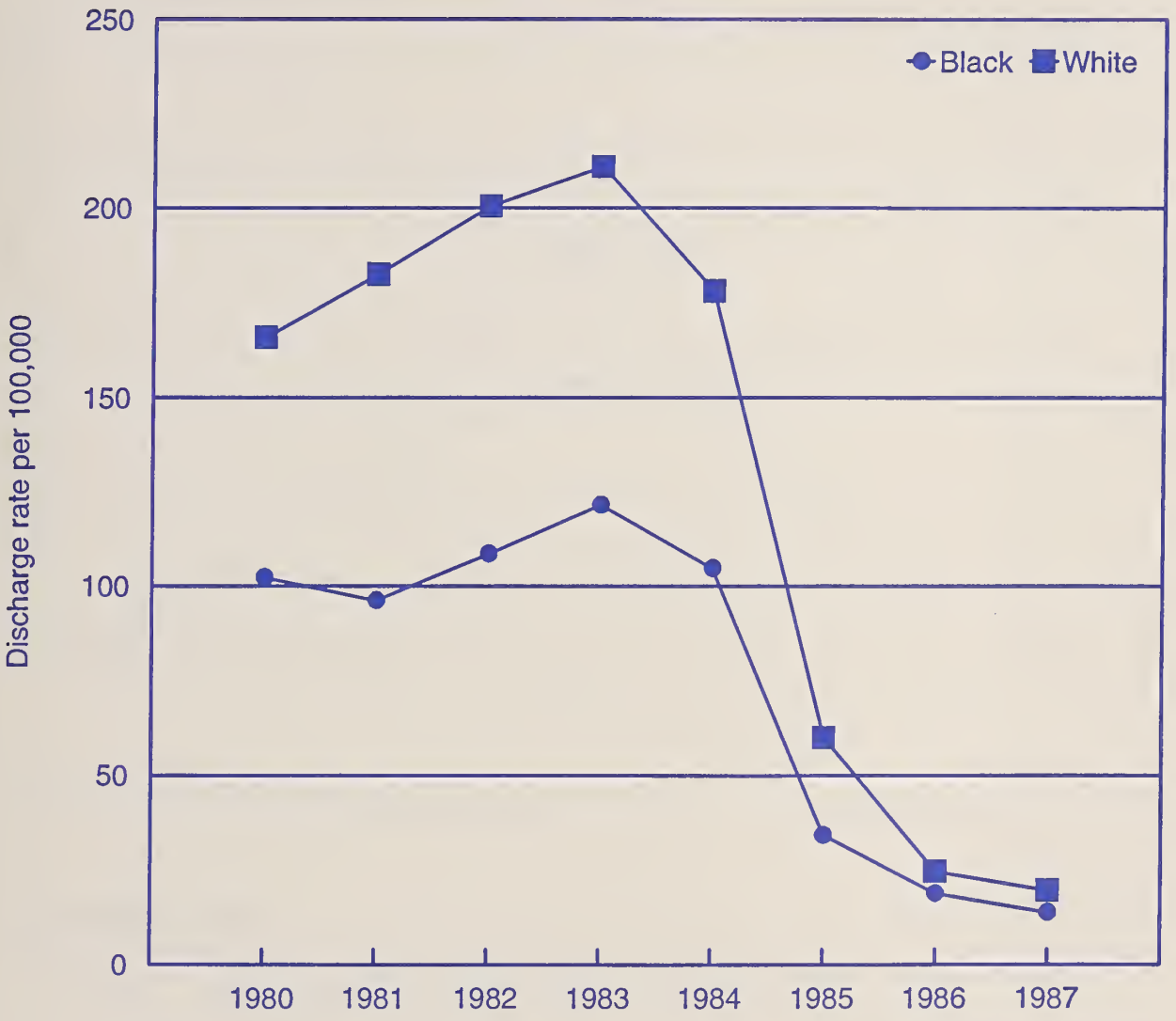
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	35.2 (27.0, 43.3)	32.8 (26.1, 39.4)	33.8 (27.0, 40.6)	29.1 (23.0, 35.2)	29.1 (22.8, 35.3)	28.5 (21.1, 35.8)	22.0 (16.3, 27.6)	16.6 (12.0, 21.2)	-8.8 (-12.1, -5.5)
White	52.9 (44.9, 60.8)	51.6 (46.4, 56.9)	49.6 (45.0, 54.1)	44.7 (40.4, 49.0)	43.1 (38.7, 47.5)	34.9 (30.5, 39.3)	32.5 (26.9, 38.0)	29.2 (22.4, 36.0)	-8.6 (-10.1, -7.1)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

75. Cataract



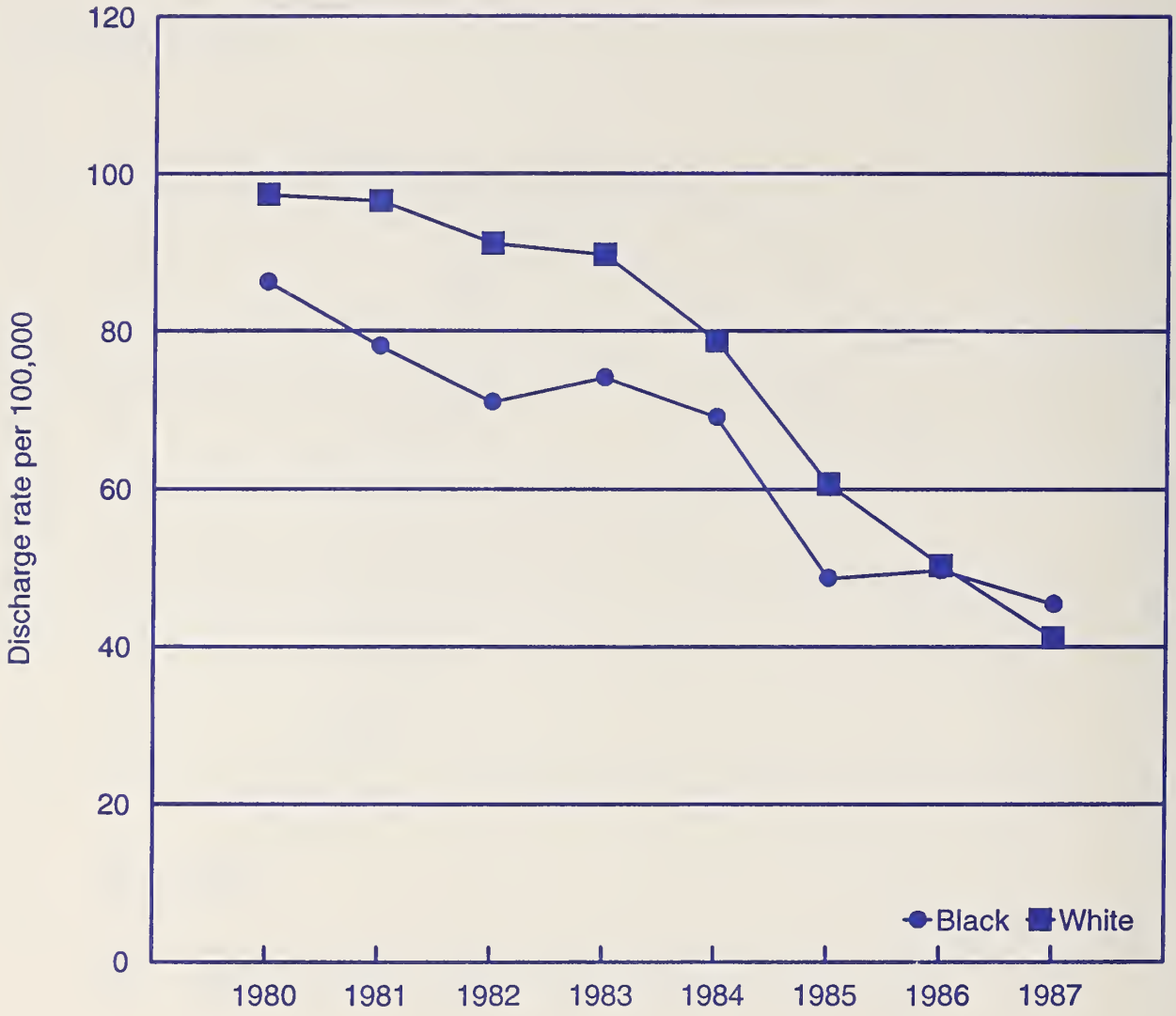
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	102.2 (76.5, 127.9)	96.2 (68.5, 123.9)	108.4 (81.0, 135.8)	121.3 (92.0, 150.6)	104.6 (76.3, 132.8)	34.2 (24.0, 44.3)	18.7 (11.5, 25.9)	13.6 (8.3, 19.0)	-26.5 (-36.9, -14.4)
White	165.8 (144.2, 187.5)	182.4 (161.7, 203.1)	200.4 (177.5, 223.4)	210.8 (186.5, 235.1)	178.0 (153.6, 202.4)	60.0 (48.1, 71.9)	24.5 (18.1, 30.9)	19.4 (10.6, 28.2)	-29.1 (-40.3, -15.8)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

76. Other eye disorders



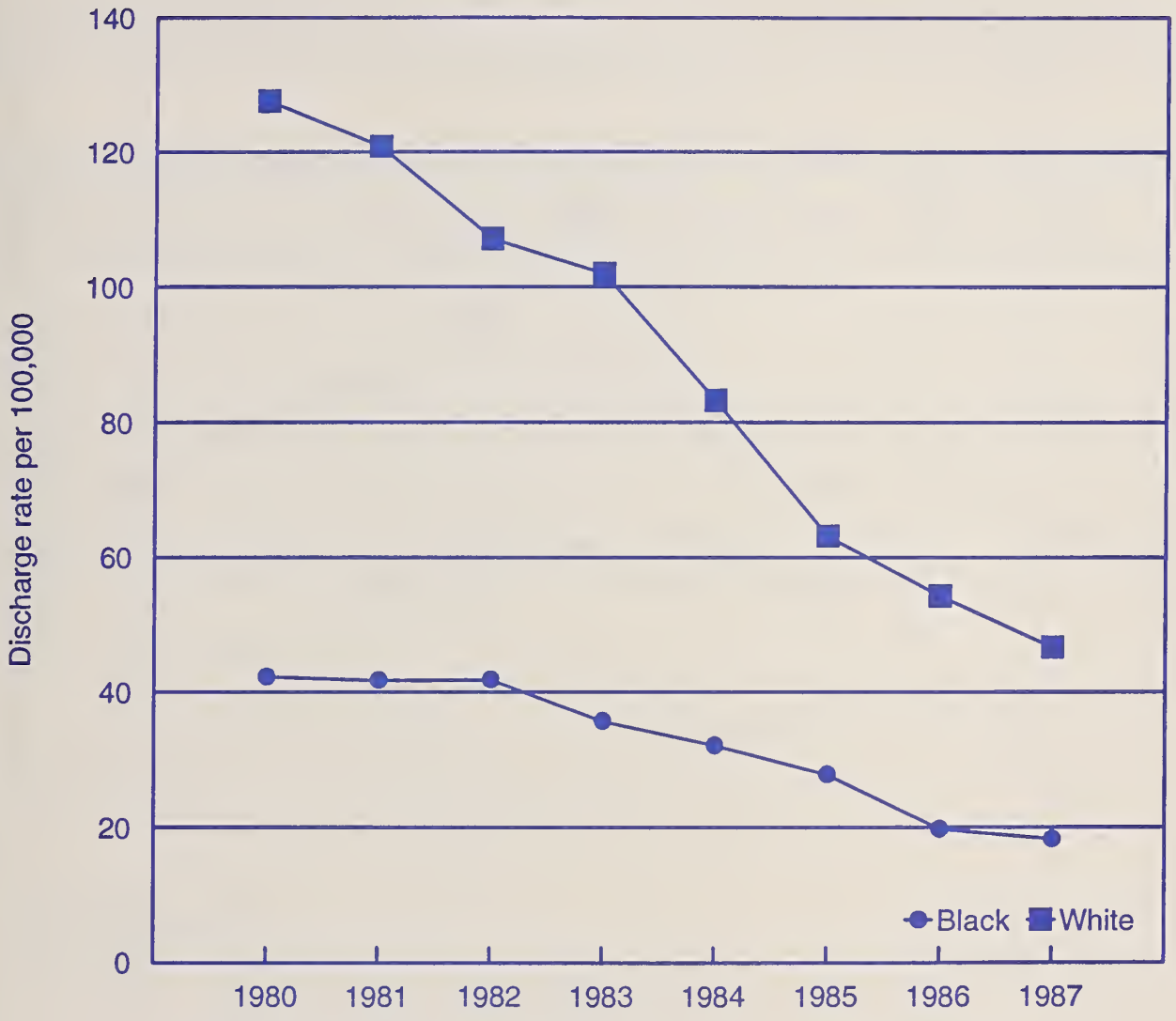
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	86.2 (65.6, 106.9)	78.1 (60.6, 95.6)	71.0 (52.0, 90.1)	74.1 (52.5, 95.7)	69.1 (51.9, 86.2)	48.7 (35.7, 61.6)	49.7 (33.2, 66.2)	45.4 (31.6, 59.2)	-9.0 (-11.4, -6.6)
White	97.3 (84.7, 109.9)	96.5 (85.7, 107.3)	91.1 (80.3, 101.8)	89.7 (77.7, 101.8)	78.7 (67.5, 90.0)	60.6 (49.6, 71.6)	50.3 (42.4, 58.2)	41.1 (34.4, 47.9)	-11.9 (-15.0, -8.6)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

77. Otitis media and related conditions



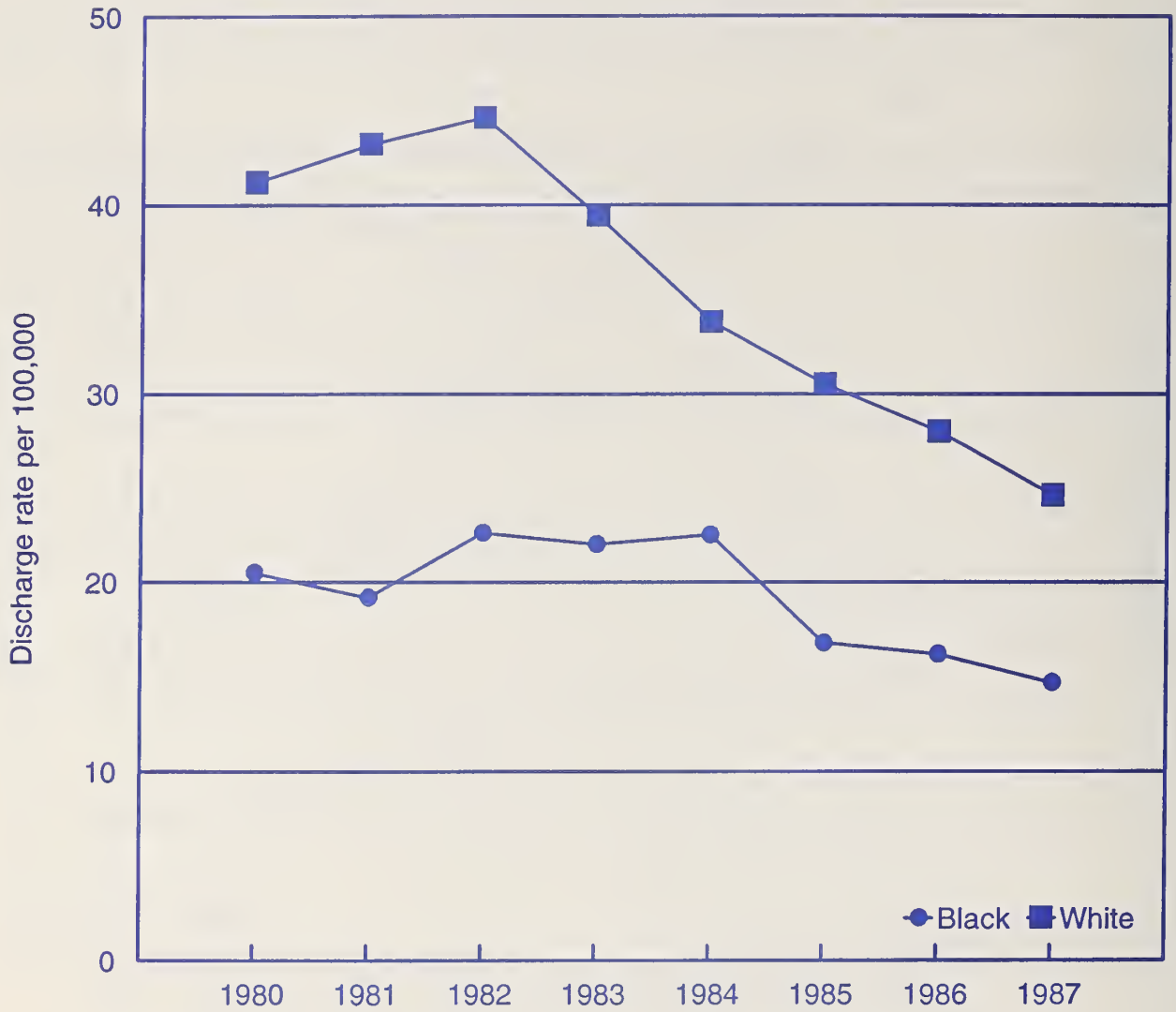
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	42.2 (31.4, 53.0)	41.7 (31.8, 51.7)	41.8 (32.3, 51.4)	35.7 (28.3, 43.1)	32.1 (25.3, 39.0)	27.8 (21.4, 34.2)	19.7 (14.9, 24.5)	18.2 (13.0, 23.5)	-12.2 (-15.2, -9.1)
White	127.5 (107.8, 147.1)	120.8 (102.6, 139.0)	107.1 (90.7, 123.5)	101.9 (81.5, 122.3)	83.2 (64.2, 102.1)	63.1 (48.2, 78.1)	54.2 (37.6, 70.8)	46.6 (32.0, 61.2)	-14.2 (-16.3, -12.0)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

78. Conditions associated with dizziness or vertigo



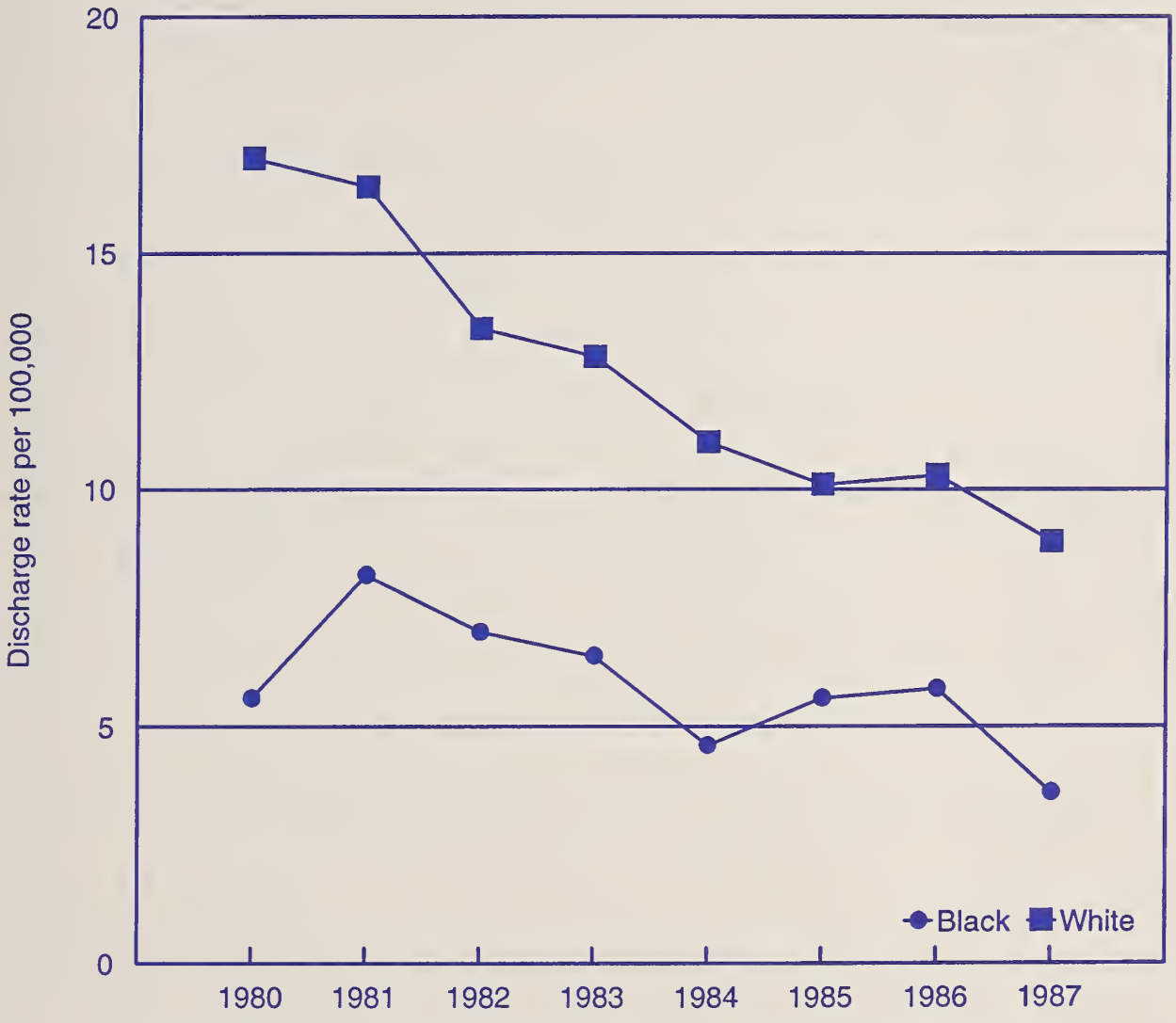
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	20.5 (15.1, 25.9)	19.2 (14.8, 23.5)	22.6 (17.8, 27.4)	22.0 (17.0, 26.9)	22.5 (16.4, 28.6)	16.8 (12.6, 21.0)	16.2 (11.9, 20.5)	14.7 (10.8, 18.6)	-4.7 (-8.3, -1.0)
White	41.2 (38.0, 44.5)	43.2 (39.7, 46.6)	44.6 (41.3, 47.9)	39.4 (36.6, 42.3)	33.8 (31.0, 36.5)	30.5 (27.7, 33.2)	28.0 (25.7, 30.4)	24.6 (22.1, 27.2)	-8.1 (-10.3, -5.8)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

79. Other ear and sense organ disorders



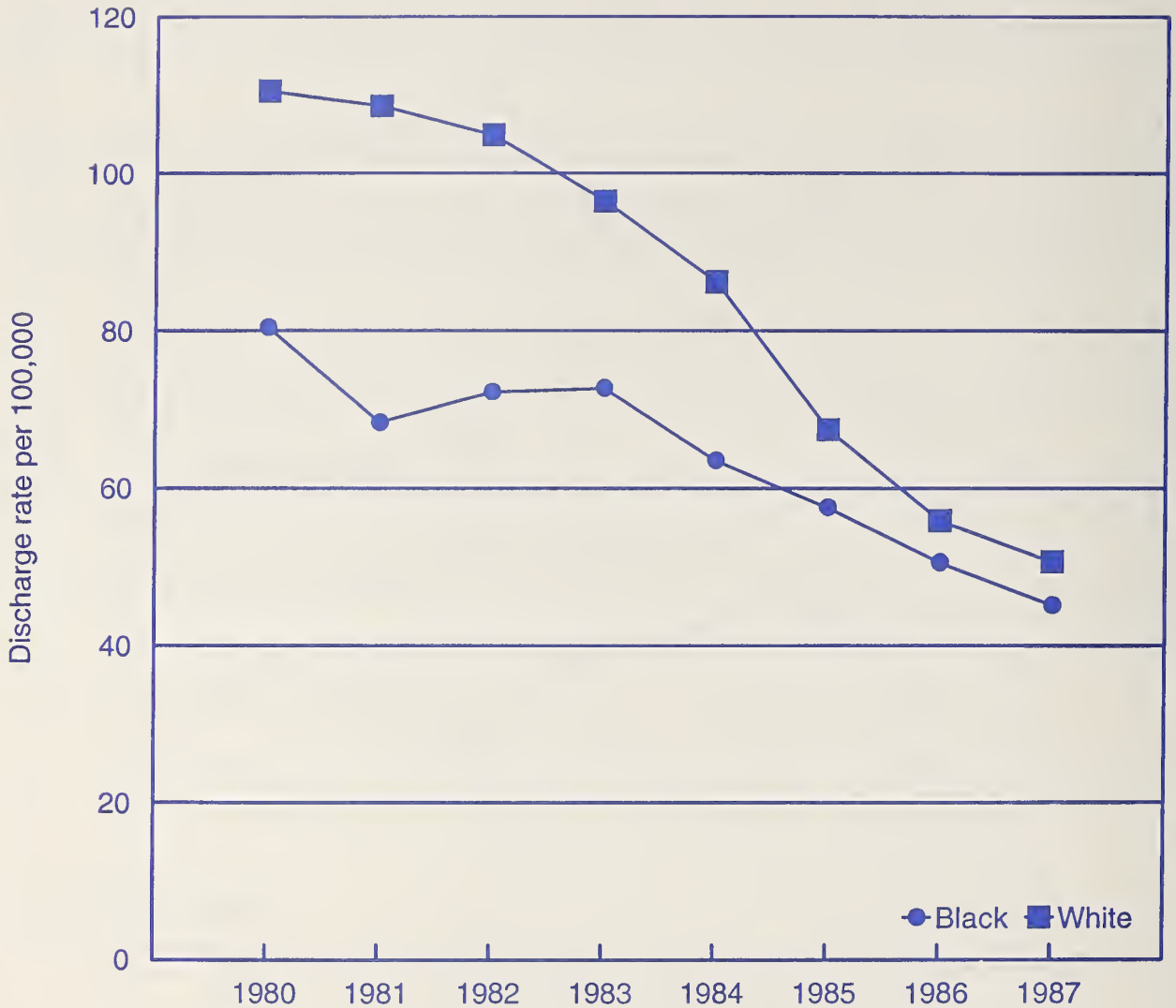
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	5.6 (3.3, 7.9)	8.2 (5.1, 11.3)	7.0 (4.4, 9.6)	6.5 (4.3, 8.7)	4.6 (2.8, 6.5)	5.6 (3.3, 7.8)	5.8 (3.3, 8.3)	3.6 (1.8, 5.4)	-6.7 (-12.2, -0.9)
White	17.0 (14.2, 19.8)	16.4 (14.1, 18.7)	13.4 (11.4, 15.4)	12.8 (10.9, 14.8)	11.0 (9.5, 12.5)	10.1 (8.6, 11.6)	10.3 (8.5, 12.2)	8.9 (7.2, 10.5)	-9.0 (-10.4, -7.5)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

80. Other nervous system disorders



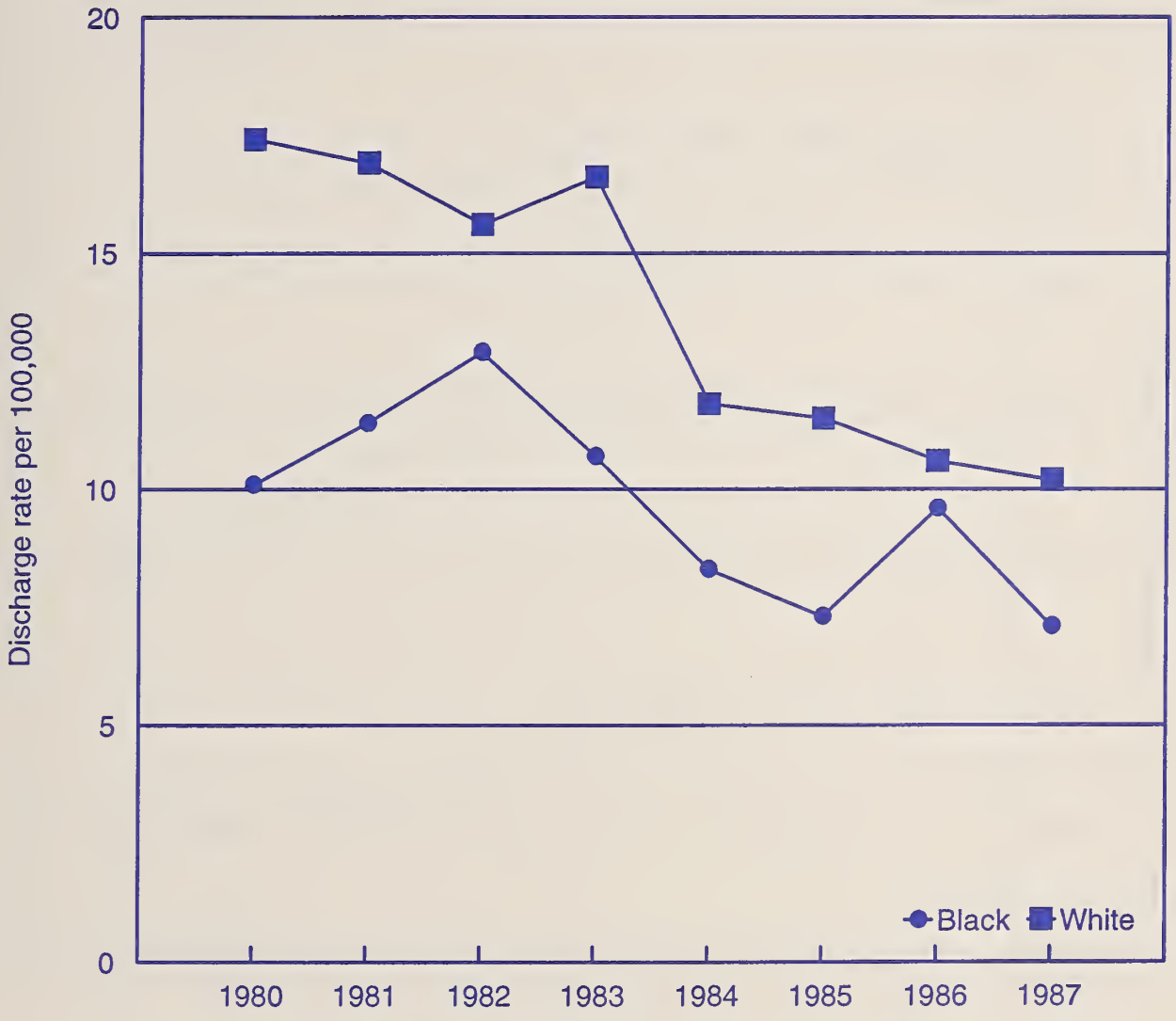
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	80.4 (65.6, 95.1)	68.3 (57.1, 79.6)	72.2 (61.7, 82.7)	72.7 (61.4, 84.0)	63.5 (51.9, 75.0)	57.5 (46.9, 68.1)	50.5 (40.7, 60.2)	45.1 (36.1, 54.0)	-7.3 (-9.3, -5.3)
White	110.4 (101.6, 119.2)	108.5 (100.2, 116.9)	104.8 (97.2, 112.5)	96.4 (88.8, 104.1)	86.2 (78.9, 93.5)	67.4 (60.9, 73.9)	55.8 (49.8, 61.9)	50.6 (44.6, 56.7)	-11.5 (-13.9, -8.9)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

81. Acute and chronic rheumatic disease



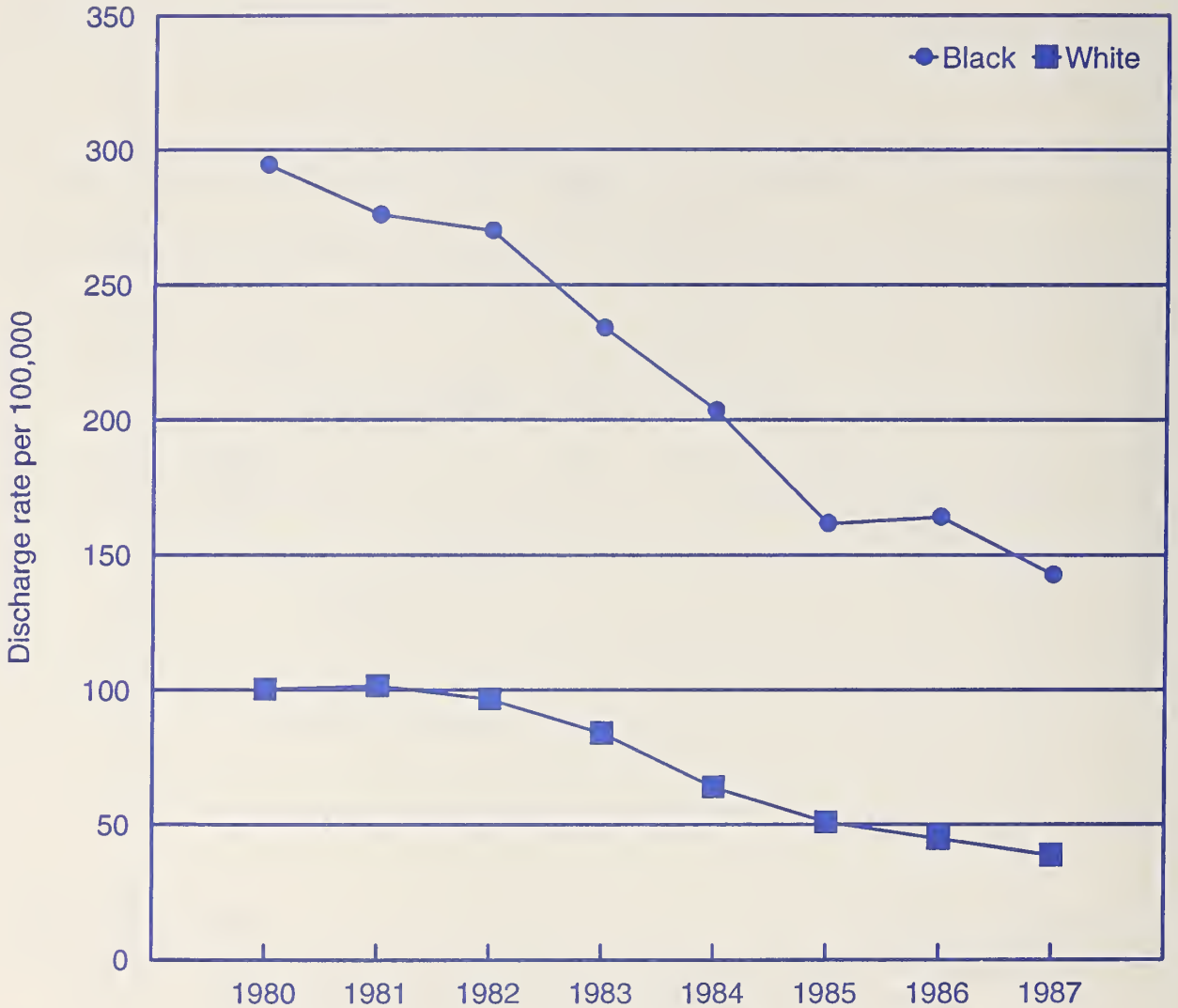
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	10.1 (6.8, 13.3)	11.4 (8.2, 14.6)	12.9 (8.9, 16.9)	10.7 (7.3, 14.2)	8.3 (5.0, 11.6)	7.3 (4.6, 10.0)	9.6 (6.3, 12.8)	7.1 (4.6, 9.5)	-6.2 (-10.6, -1.5)
White	17.4 (15.1, 19.7)	16.9 (14.8, 19.0)	15.6 (13.1, 18.1)	16.6 (14.2, 19.0)	11.8 (9.9, 13.7)	11.5 (9.4, 13.6)	10.6 (8.9, 12.3)	10.2 (8.3, 12.0)	-8.4 (-10.6, -6.1)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

82. Hypertension



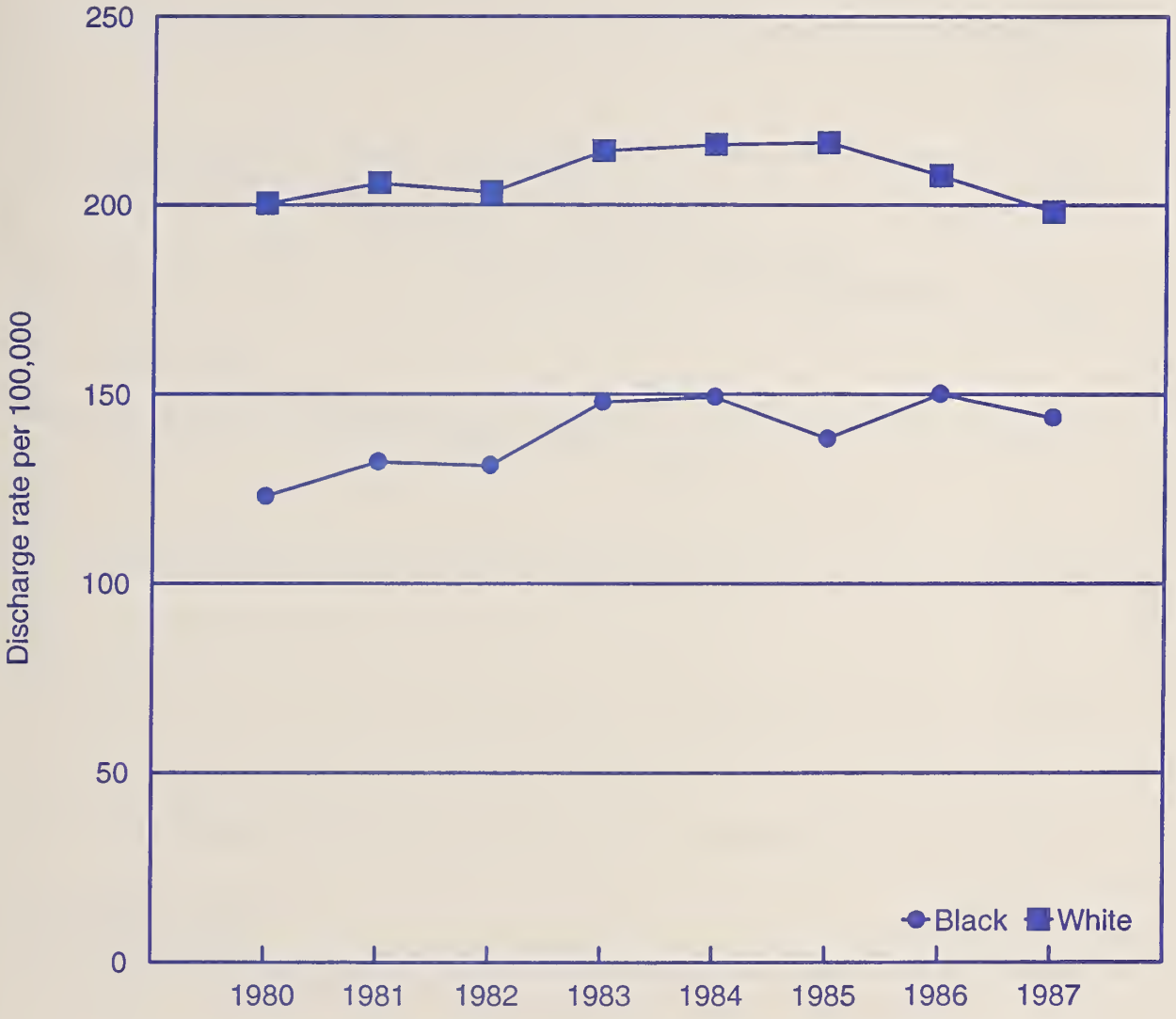
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	294.4 (238.7, 350.0)	275.9 (231.7, 320.1)	270.0 (227.0, 312.9)	234.0 (196.3, 271.7)	203.4 (171.2, 235.7)	161.5 (132.8, 190.2)	163.9 (135.7, 192.1)	142.5 (116.4, 168.6)	-10.5 (-12.2, -8.9)
White	100.2 (93.7, 106.7)	101.5 (94.6, 108.4)	96.6 (90.5, 102.7)	83.9 (78.2, 89.6)	63.8 (58.9, 68.6)	50.8 (46.9, 54.6)	44.7 (41.2, 48.3)	38.5 (35.0, 42.0)	-14.3 (-16.9, -11.7)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

83. Acute myocardial infarction



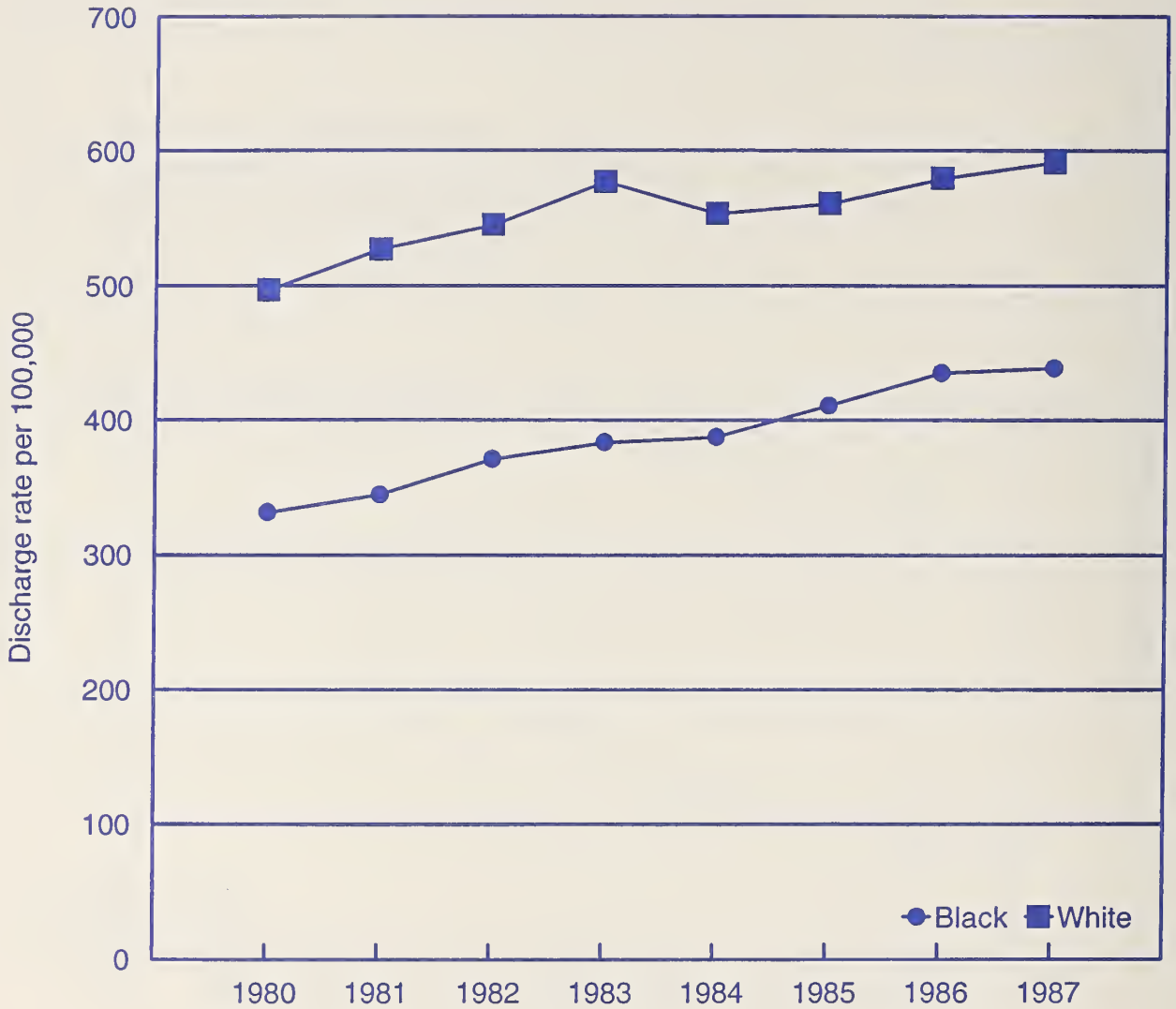
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	123.0 (105.6, 140.4)	132.1 (111.2, 152.9)	131.2 (112.2, 150.2)	147.9 (126.8, 169.0)	149.2 (127.5, 170.9)	138.2 (117.1, 159.4)	150.0 (124.9, 175.1)	143.8 (119.1, 168.5)	2.3 (0.7, 3.9)
White	200.3 (189.8, 210.8)	205.7 (194.8, 216.6)	203.3 (192.9, 213.8)	214.3 (203.3, 225.3)	216.0 (205.0, 226.9)	216.5 (205.0, 227.9)	207.7 (196.4, 219.0)	198.1 (186.4, 209.8)	0.2 (–0.9, 1.3)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

84. Ischemic heart disease



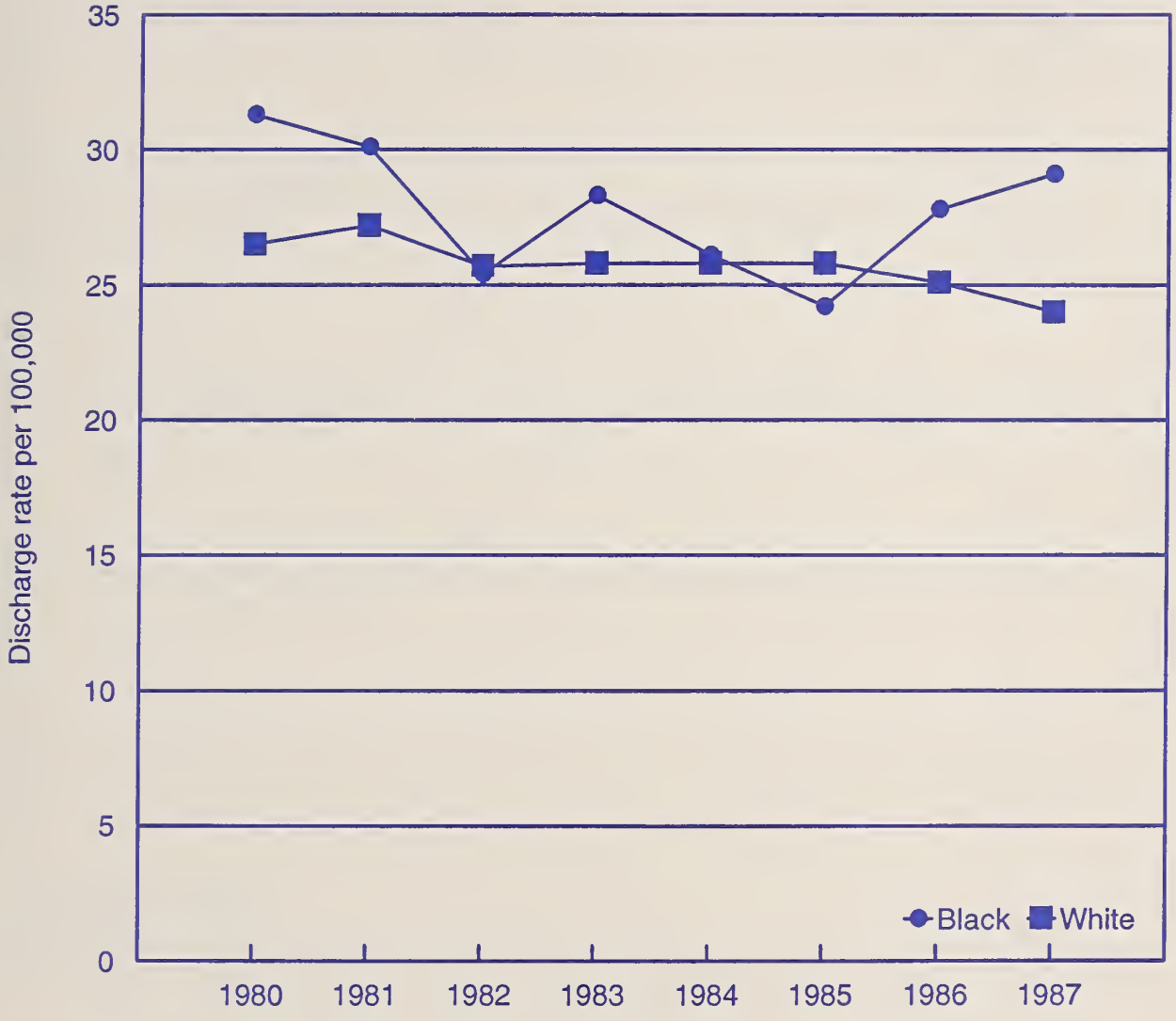
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	331.3 (271.9, 390.7)	344.4 (286.8, 402.0)	370.8 (307.4, 434.2)	383.2 (322.7, 443.8)	387.2 (326.9, 447.5)	410.5 (350.4, 470.5)	434.8 (360.6, 509.0)	438.4 (366.7, 510.0)	4.2 (3.7, 4.7)
White	496.5 (462.0, 531.0)	526.9 (490.8, 563.0)	545.0 (506.7, 583.3)	577.1 (531.2, 623.1)	553.4 (510.7, 596.2)	560.9 (513.3, 608.6)	579.6 (532.4, 626.8)	591.2 (541.4, 641.0)	2.1 (1.2, 3.0)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

85. Diseases of pulmonary circulation



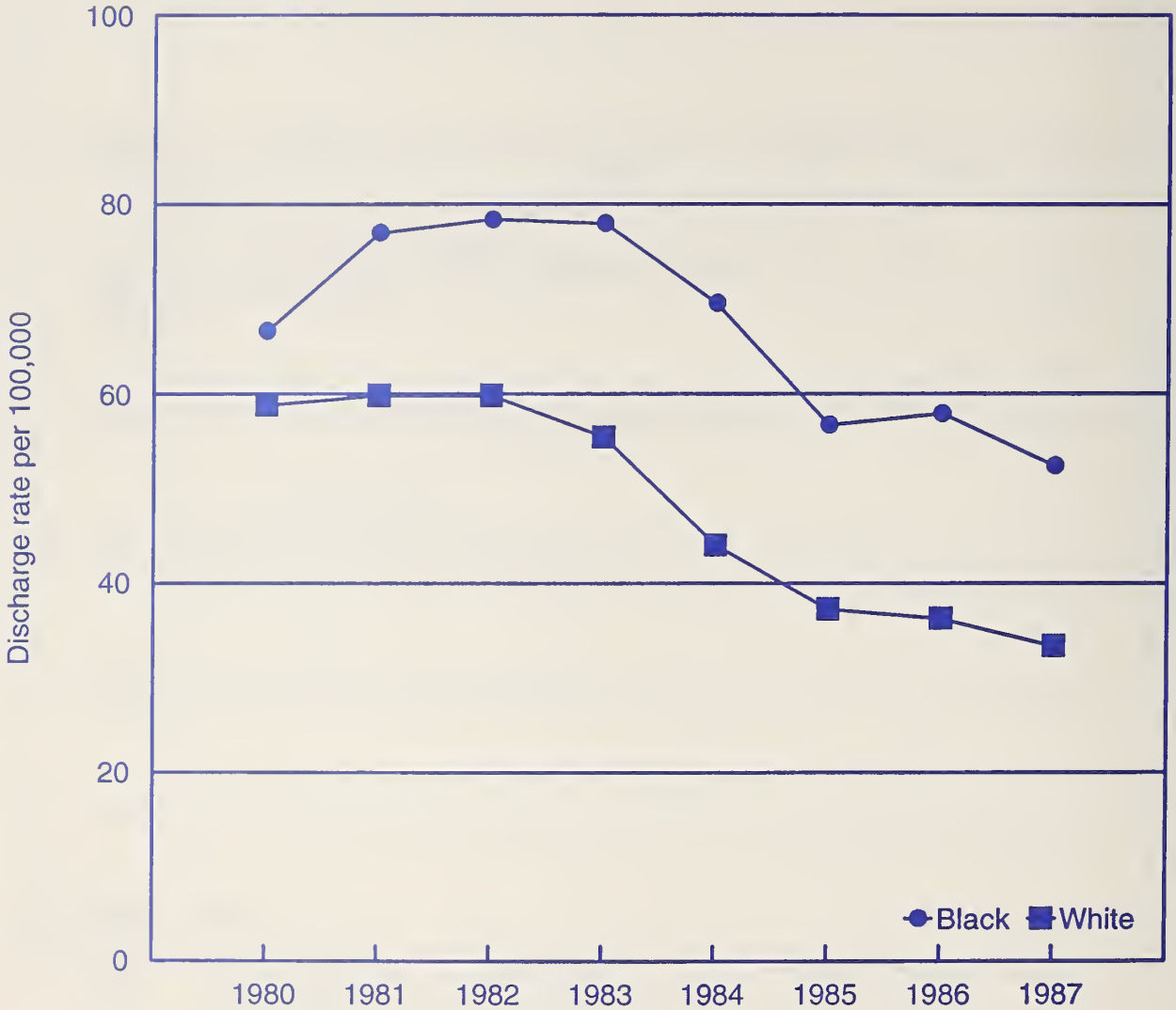
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	31.3 (24.3, 38.4)	30.1 (23.5, 36.7)	25.4 (19.4, 31.5)	28.3 (23.0, 33.7)	26.1 (21.1, 31.2)	24.2 (18.6, 29.9)	27.8 (21.3, 34.2)	29.1 (21.6, 36.7)	-1.4 (-3.9, 1.3)
White	26.5 (24.2, 28.7)	27.2 (24.8, 29.6)	25.7 (23.5, 27.9)	25.8 (23.8, 27.7)	25.8 (23.6, 27.9)	25.8 (23.7, 27.9)	25.1 (23.0, 27.2)	24.0 (21.8, 26.1)	-1.3 (-1.9, -0.7)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

86. Other and ill-defined heart disease



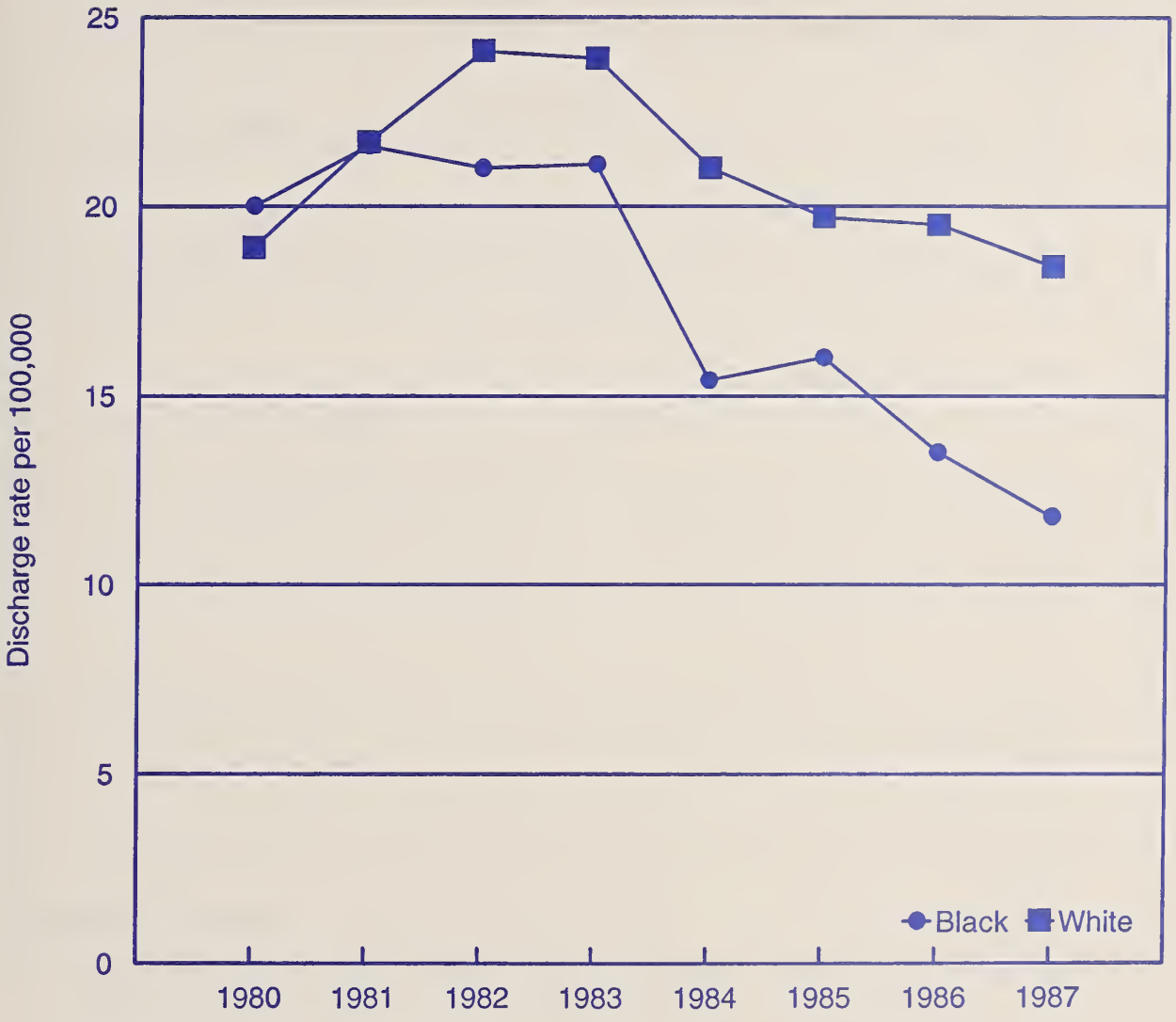
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	66.6 (52.9, 80.3)	76.9 (63.0, 90.7)	78.3 (65.1, 91.4)	77.9 (65.0, 90.9)	69.5 (57.2, 81.8)	56.7 (46.2, 67.1)	57.9 (45.8, 70.0)	52.4 (42.4, 62.4)	–4.8 (–8.0, –1.6)
White	58.8 (52.6, 64.9)	59.8 (53.9, 65.7)	59.8 (54.3, 65.2)	55.4 (50.6, 60.2)	44.0 (39.0, 48.9)	37.2 (33.2, 41.2)	36.2 (32.8, 39.6)	33.3 (29.9, 36.7)	–9.2 (–11.6, –6.9)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

87. Heart valve disorders



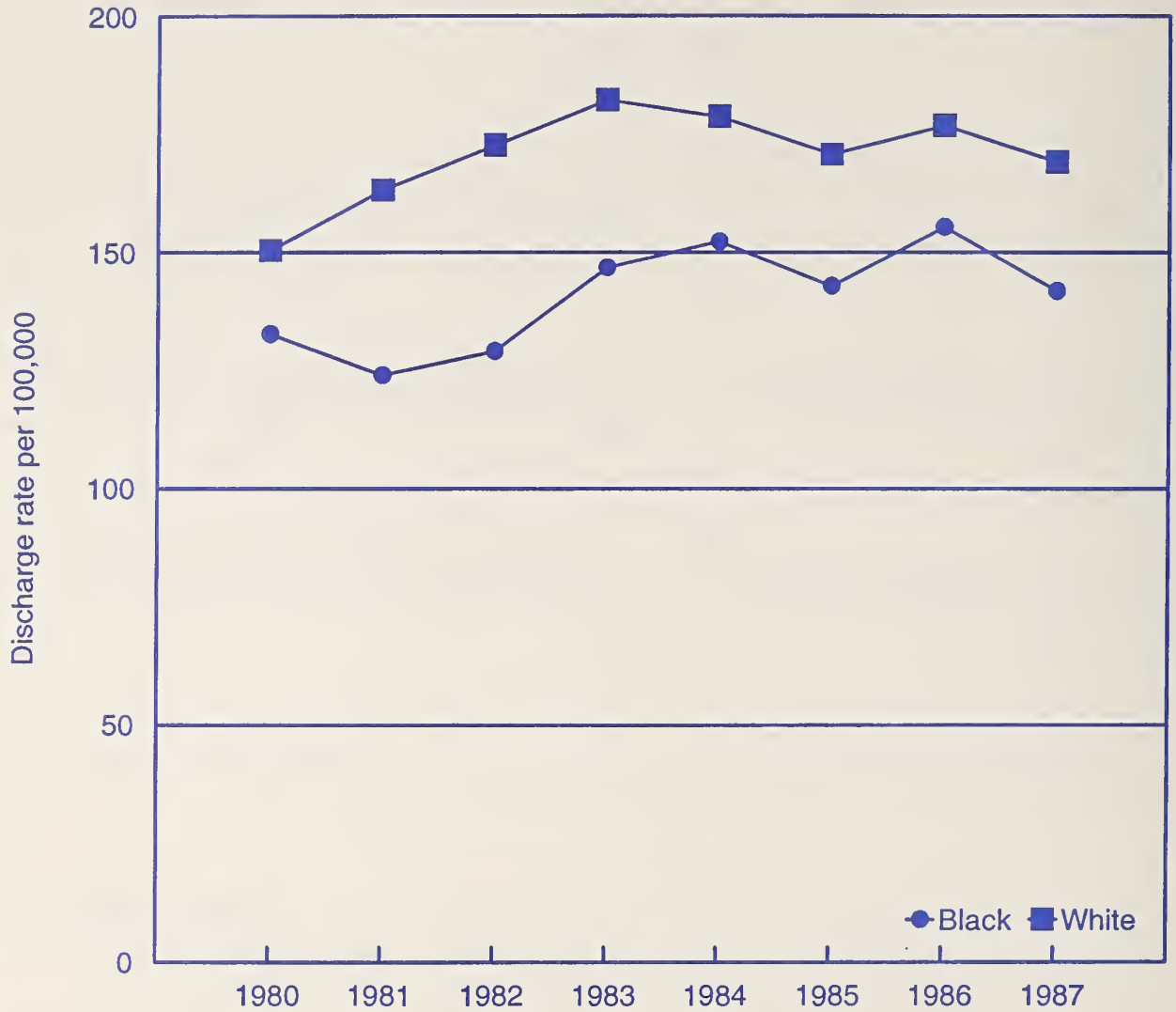
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	20.0 (13.2, 26.8)	21.6 (15.9, 27.4)	21.0 (15.3, 26.7)	21.1 (15.6, 26.6)	15.4 (10.2, 20.6)	16.0 (11.2, 20.8)	13.5 (7.9, 19.0)	11.8 (8.6, 15.0)	-8.2 (-11.1, -5.2)
White	18.9 (16.3, 21.5)	21.7 (18.7, 24.7)	24.1 (21.0, 27.3)	23.9 (20.6, 27.2)	21.0 (17.7, 24.2)	19.7 (16.6, 22.8)	19.5 (16.2, 22.8)	18.4 (15.5, 21.2)	-1.8 (-4.7, 1.3)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

88. Conduction disorders, dysrhythmias



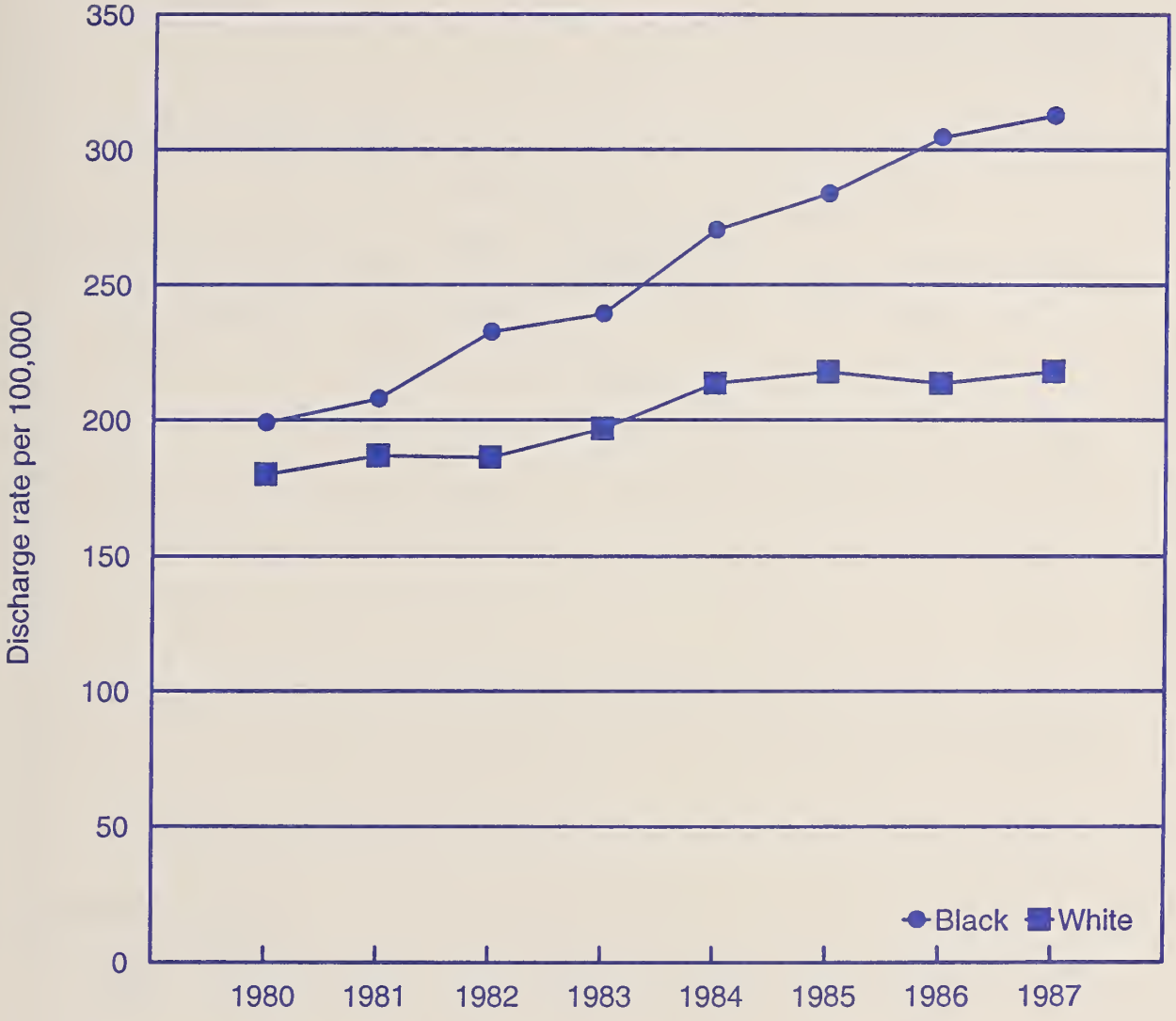
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	132.6 (109.0, 156.2)	123.9 (106.1, 141.6)	129.0 (109.8, 148.2)	146.7 (126.1, 167.3)	152.2 (130.0, 174.4)	142.8 (119.7, 165.9)	155.3 (124.6, 186.1)	141.7 (115.7, 167.7)	2.3 (0.4, 4.3)
White	150.3 (142.0, 158.5)	163.1 (154.7, 171.6)	172.6 (164.0, 181.2)	182.2 (173.1, 191.2)	178.7 (169.7, 187.7)	170.7 (161.0, 180.5)	176.8 (166.2, 187.4)	169.1 (157.4, 180.8)	1.4 (–0.2, 3.1)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

89. Congestive heart failure



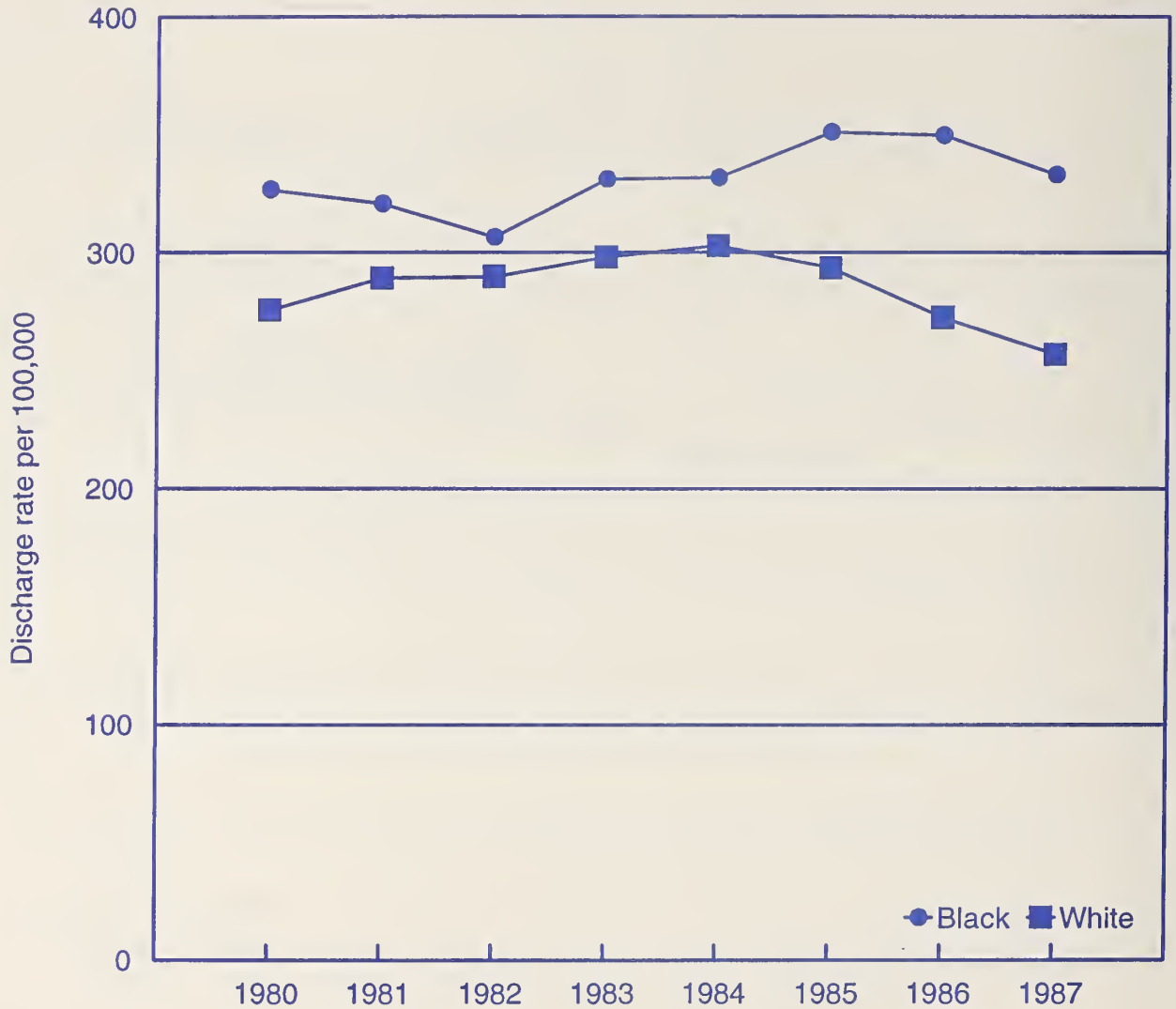
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	198.9 (168.4, 229.3)	207.8 (175.2, 240.4)	232.5 (197.5, 267.4)	239.2 (205.3, 273.1)	270.2 (230.2, 310.3)	283.7 (242.3, 325.1)	304.6 (254.2, 355.0)	312.7 (263.6, 361.8)	7.1 (6.4, 7.9)
White	179.8 (169.6, 189.9)	186.7 (176.5, 196.9)	186.1 (176.1, 196.2)	196.7 (187.0, 206.4)	213.4 (203.0, 223.7)	217.7 (206.5, 228.8)	213.4 (201.5, 225.3)	218.0 (205.7, 230.4)	3.1 (2.2, 4.0)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

90. Cerebrovascular disease



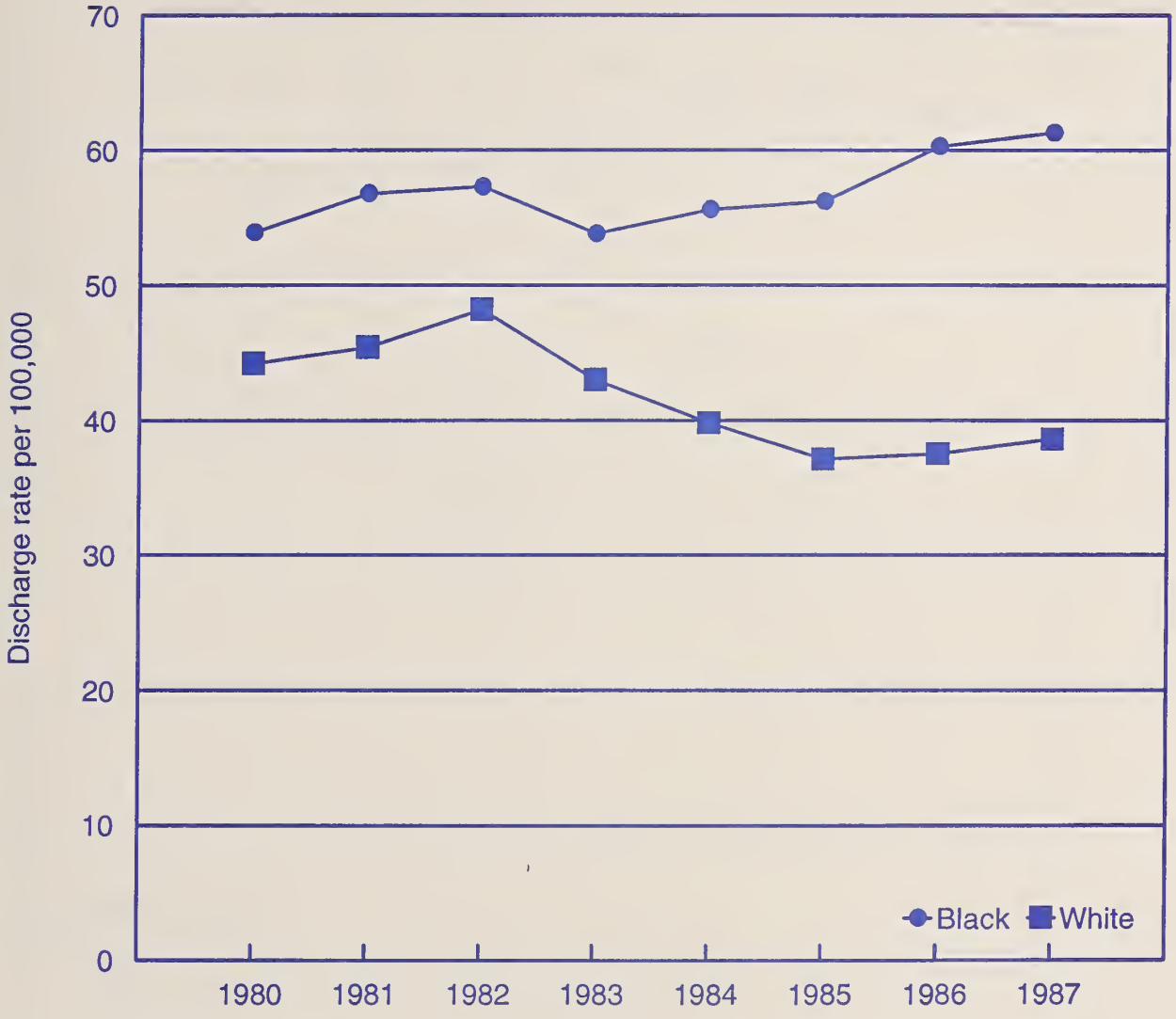
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	326.4 (276.6, 376.1)	320.4 (273.9, 366.8)	306.2 (263.5, 348.9)	330.8 (284.0, 377.7)	331.5 (285.7, 377.4)	350.9 (299.9, 401.9)	349.5 (289.5, 409.5)	332.8 (280.7, 385.0)	1.2 (0.1, 2.3)
White	275.5 (260.7, 290.3)	289.0 (273.7, 304.2)	289.6 (274.8, 304.4)	297.8 (282.1, 313.5)	302.7 (286.9, 318.5)	293.4 (277.6, 309.2)	272.4 (256.9, 287.9)	256.8 (241.8, 271.8)	-0.9 (-2.5, 0.8)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

91. Atherosclerosis (not heart or brain)



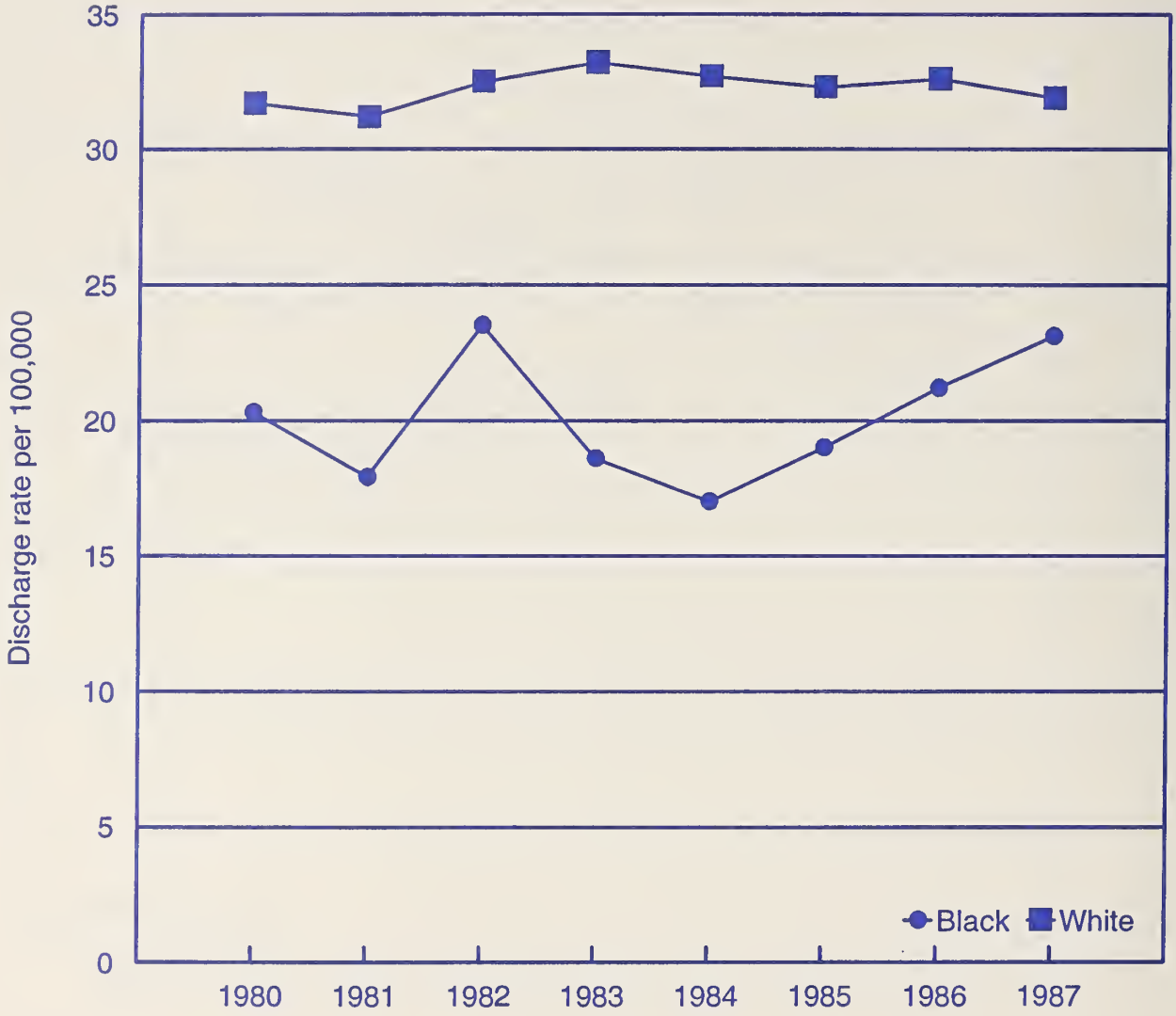
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	53.9 (42.4, 65.4)	56.8 (44.1, 69.6)	57.3 (46.4, 68.3)	53.8 (41.1, 66.5)	55.6 (41.6, 69.7)	56.2 (41.7, 70.7)	60.3 (39.6, 80.9)	61.3 (37.2, 85.4)	1.4 (0.3, 2.5)
White	44.2 (40.5, 48.0)	45.4 (41.7, 49.1)	48.2 (44.5, 51.9)	43.0 (38.9, 47.1)	39.8 (36.1, 43.6)	37.1 (33.0, 41.1)	37.5 (33.6, 41.4)	38.6 (33.0, 44.2)	-3.3 (-4.9, -1.6)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

92. Aneurysm and disorders of arteries



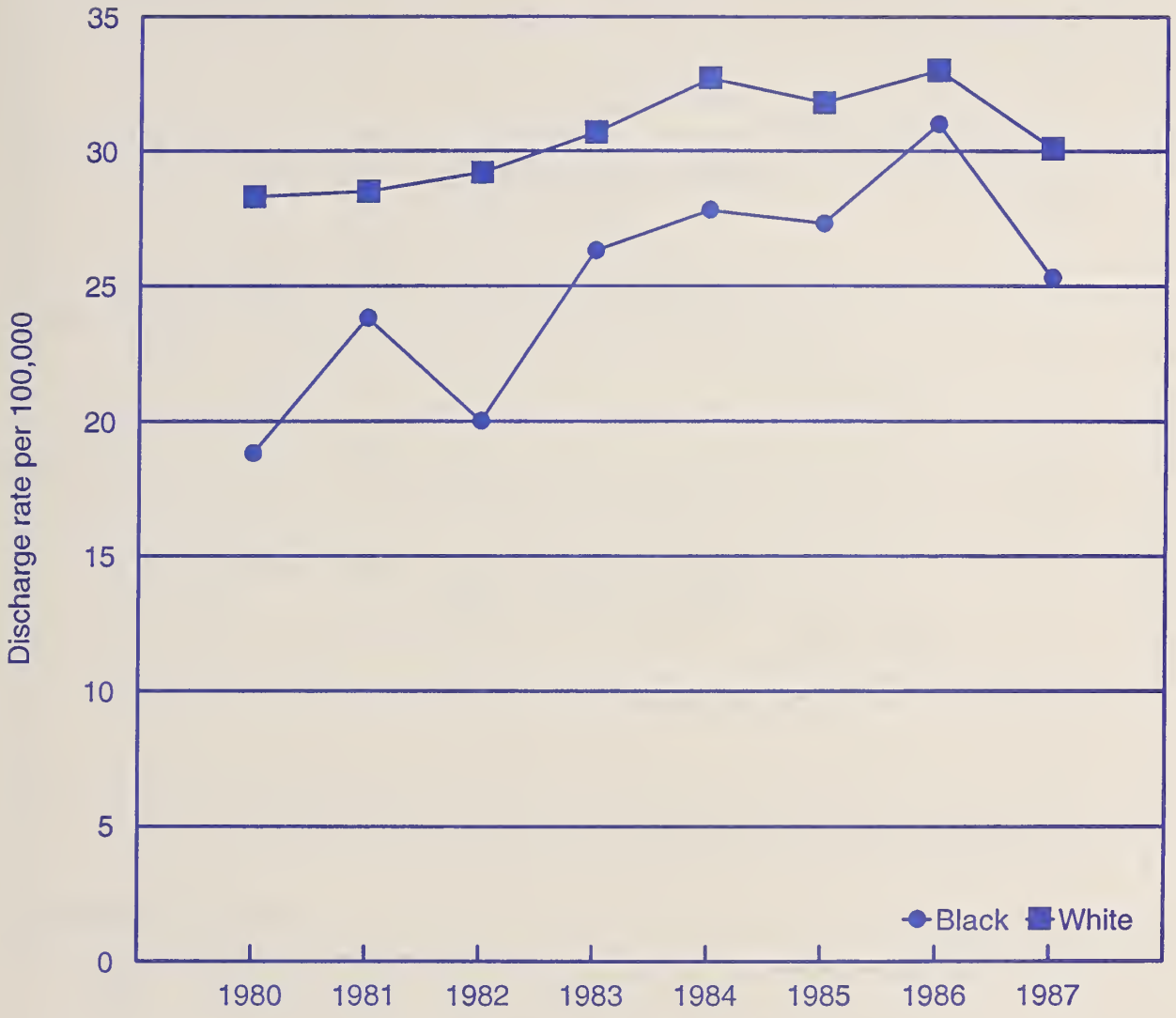
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	20.3 (14.0, 26.7)	17.9 (12.9, 22.9)	23.5 (18.4, 28.6)	18.6 (12.8, 24.5)	17.0 (13.2, 20.8)	19.0 (13.8, 24.1)	21.2 (15.3, 27.2)	23.1 (17.0, 29.3)	1.2 (–2.5, 5.1)
White	31.7 (28.5, 34.9)	31.2 (28.3, 34.1)	32.5 (29.7, 35.2)	33.2 (30.3, 36.1)	32.7 (29.4, 36.1)	32.3 (29.1, 35.5)	32.6 (29.4, 35.8)	31.9 (28.0, 35.8)	0.3 (–0.3, 0.9)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

93. Peripheral arterial embolism



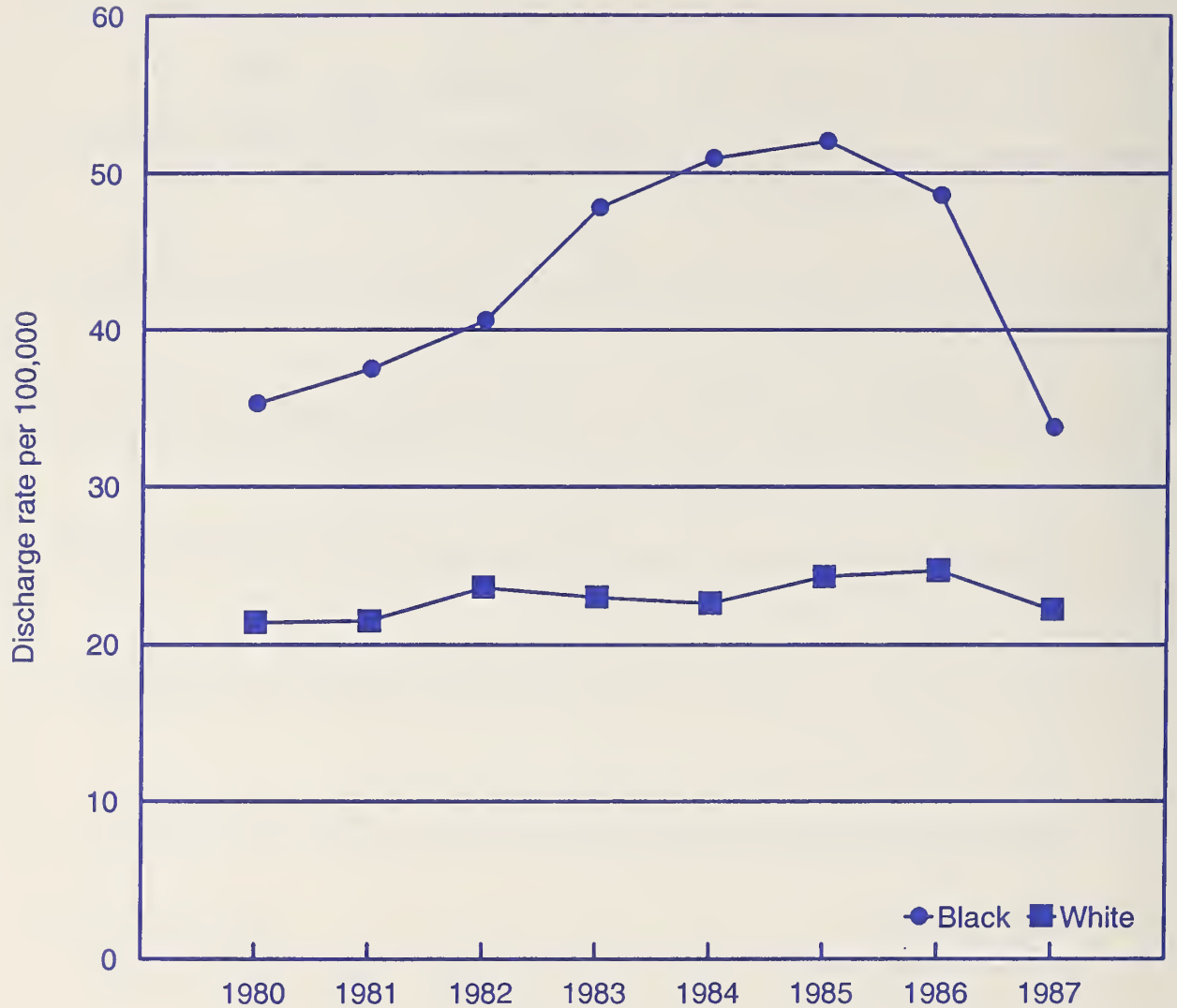
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	18.8 (13.3, 24.2)	23.8 (17.5, 30.1)	20.0 (14.3, 25.8)	26.3 (19.1, 33.5)	27.8 (21.9, 33.7)	27.3 (20.8, 33.7)	31.0 (23.3, 38.7)	25.3 (18.2, 32.5)	5.4 (1.7, 9.2)
White	28.3 (24.6, 32.1)	28.5 (24.8, 32.1)	29.2 (25.9, 32.5)	30.7 (27.7, 33.8)	32.7 (29.5, 35.9)	31.8 (28.7, 34.9)	33.0 (29.3, 36.7)	30.1 (26.3, 33.9)	1.8 (0.4, 3.2)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

94. Other circulatory disease



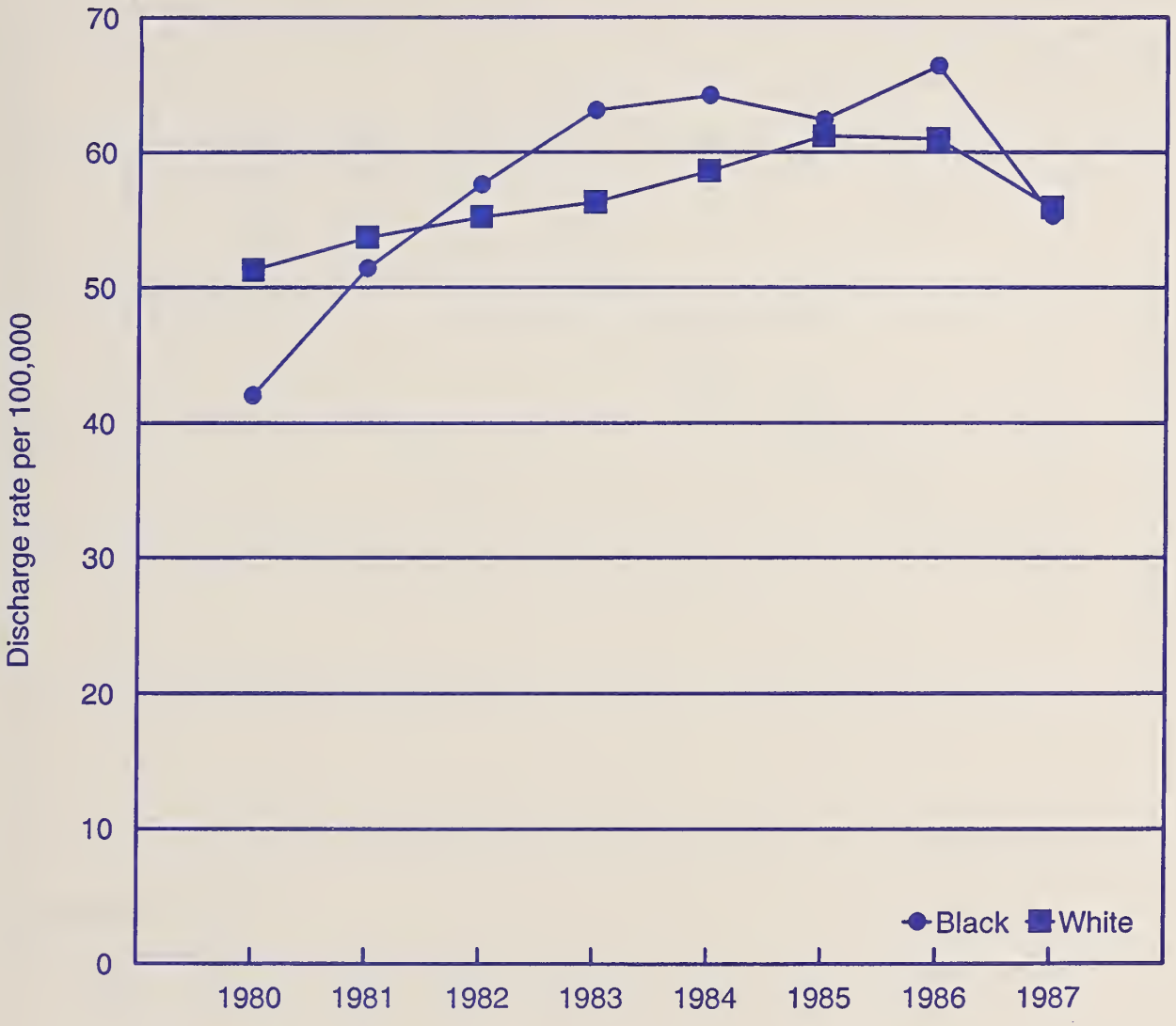
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	35.3 (27.3, 43.4)	37.5 (31.1, 44.0)	40.6 (31.9, 49.3)	47.8 (38.8, 56.9)	50.9 (40.8, 61.0)	52.0 (41.0, 63.0)	48.6 (37.8, 59.4)	33.8 (25.4, 42.3)	2.2 (–3.2, 7.8)
White	21.4 (19.4, 23.5)	21.5 (19.3, 23.6)	23.6 (21.0, 26.2)	23.0 (20.7, 25.3)	22.6 (20.6, 24.7)	24.3 (22.1, 26.5)	24.7 (20.9, 28.5)	22.2 (18.9, 25.5)	1.2 (–0.3, 2.7)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

95. Syncope



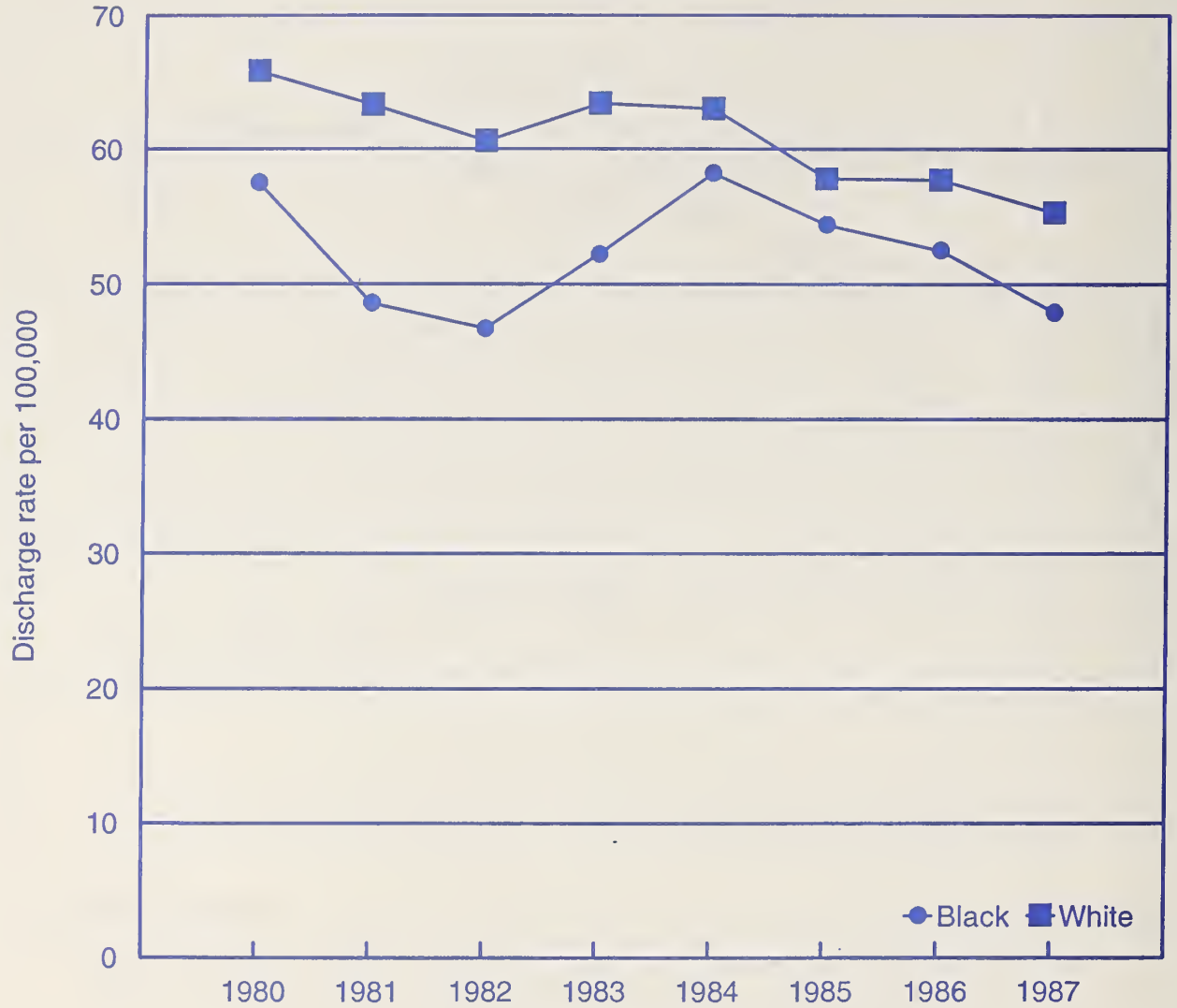
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	42.0 (31.9, 52.1)	51.4 (41.3, 61.5)	57.6 (47.9, 67.3)	63.1 (51.3, 74.8)	64.2 (52.0, 76.3)	62.4 (50.9, 73.9)	66.4 (53.3, 79.5)	55.3 (43.6, 67.0)	4.2 (0.4, 8.1)
White	51.3 (47.3, 55.4)	53.7 (50.1, 57.2)	55.2 (51.6, 58.8)	56.3 (52.7, 59.9)	58.6 (54.9, 62.4)	61.2 (57.1, 65.3)	61.0 (56.8, 65.3)	55.9 (52.0, 59.8)	1.9 (0.6, 3.3)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

96. Thrombophlebitis and thromboembolism



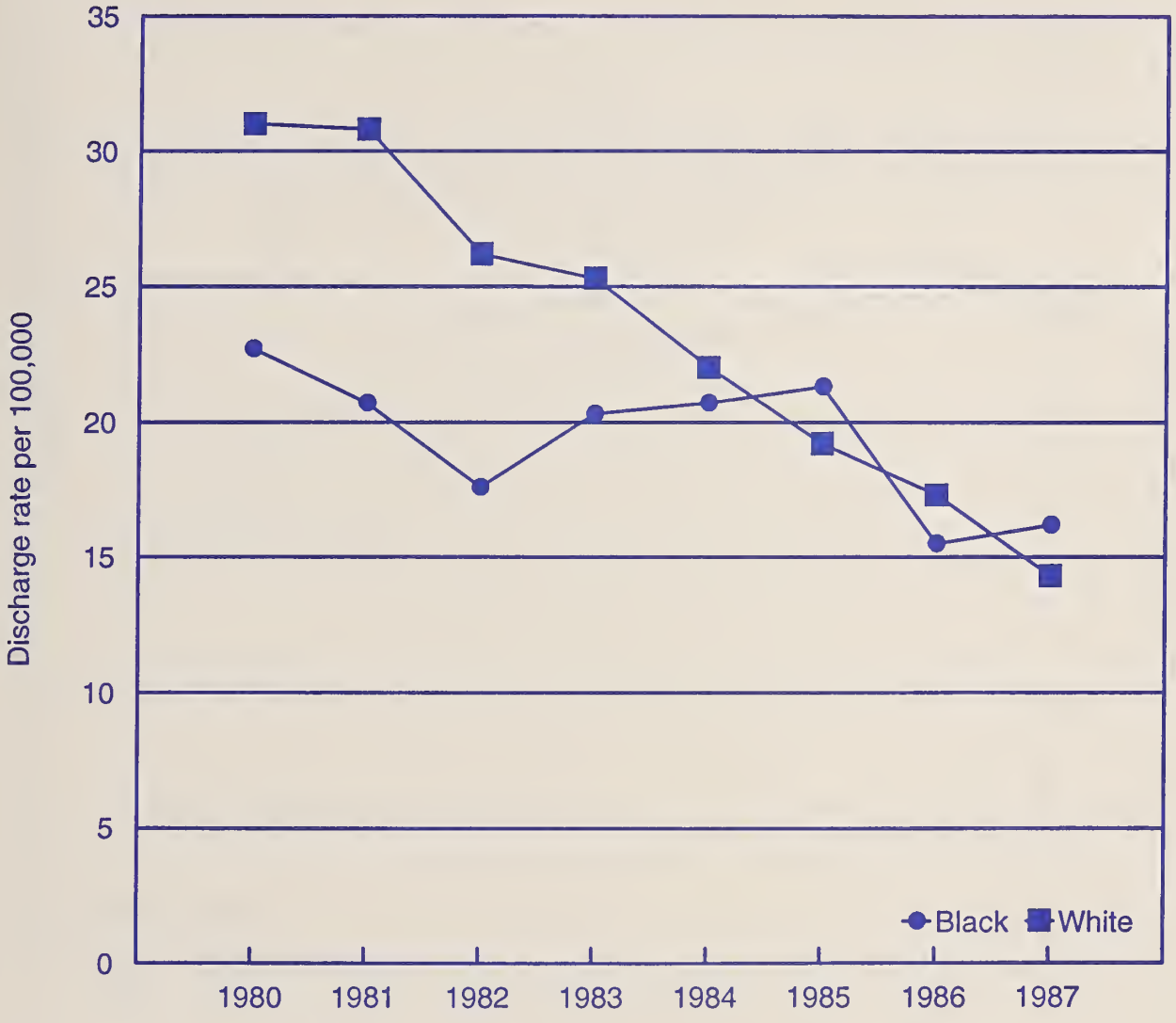
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	57.5 (45.7, 69.3)	48.6 (39.9, 57.2)	46.7 (37.2, 56.2)	52.2 (42.8, 61.5)	58.2 (48.8, 67.7)	54.4 (44.4, 64.5)	52.5 (41.2, 63.9)	47.9 (35.3, 60.5)	-0.4 (-3.0, 2.3)
White	65.8 (61.7, 69.8)	63.3 (59.0, 67.7)	60.6 (56.5, 64.6)	63.4 (59.6, 67.3)	63.0 (58.6, 67.4)	57.8 (53.6, 62.0)	57.7 (53.7, 61.7)	55.3 (51.1, 59.5)	-2.2 (-3.0, -1.3)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

97. Varicose veins of lower extremity



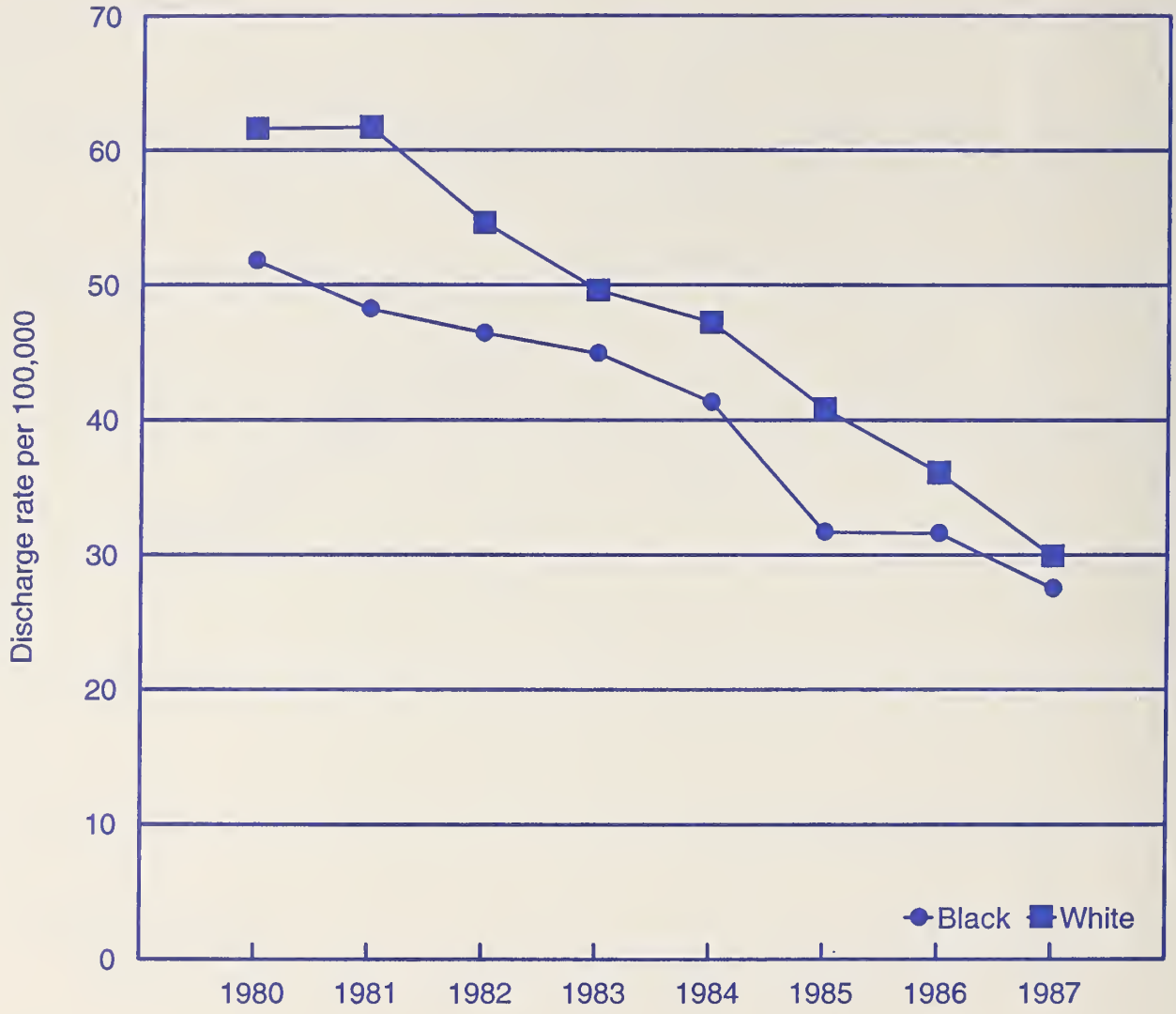
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	22.7 (16.5, 29.0)	20.7 (14.2, 27.2)	17.6 (12.4, 22.7)	20.3 (15.5, 25.1)	20.7 (16.3, 25.1)	21.3 (14.3, 28.3)	15.5 (10.5, 20.5)	16.2 (8.8, 23.6)	-3.8 (-7.0, -0.4)
White	31.0 (27.9, 34.1)	30.8 (28.3, 33.3)	26.2 (23.9, 28.5)	25.3 (23.2, 27.4)	22.0 (20.2, 23.7)	19.2 (17.1, 21.2)	17.3 (15.4, 19.2)	14.3 (12.6, 15.9)	-10.6 (-11.9, -9.2)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

98. Hemorrhoids



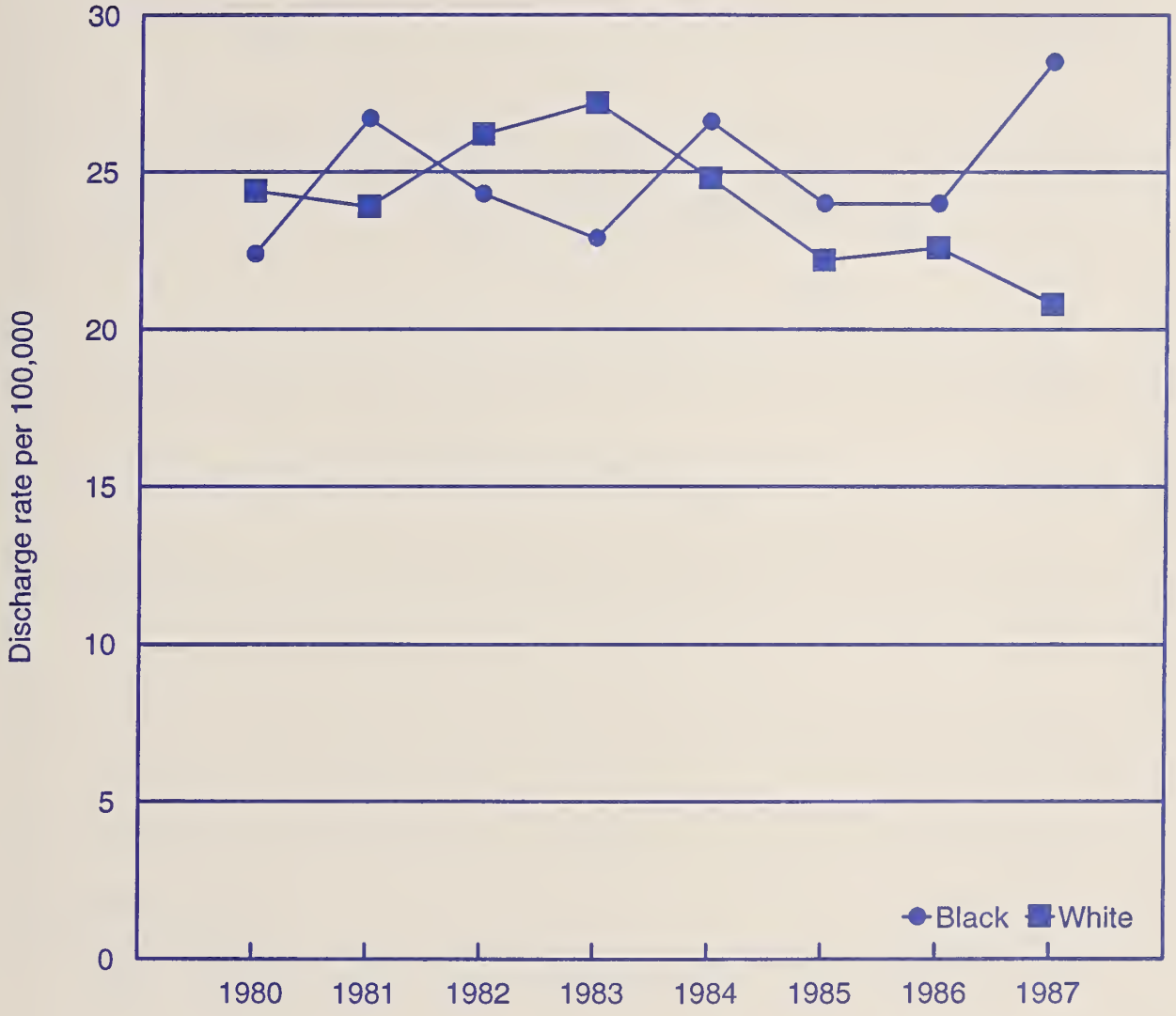
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	51.8 (40.0, 63.6)	48.2 (38.2, 58.2)	46.4 (37.6, 55.2)	44.9 (36.3, 53.5)	41.3 (34.3, 48.4)	31.7 (24.8, 38.5)	31.6 (24.6, 38.6)	27.5 (21.1, 33.8)	-8.8 (-10.7, -6.9)
White	61.6 (56.1, 67.1)	61.7 (56.0, 67.5)	54.6 (49.3, 60.0)	49.6 (45.5, 53.7)	47.2 (43.2, 51.3)	40.8 (36.9, 44.6)	36.1 (32.4, 39.8)	29.9 (26.7, 33.1)	-9.8 (-11.3, -8.3)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

99. Other diseases of veins and lymphatics



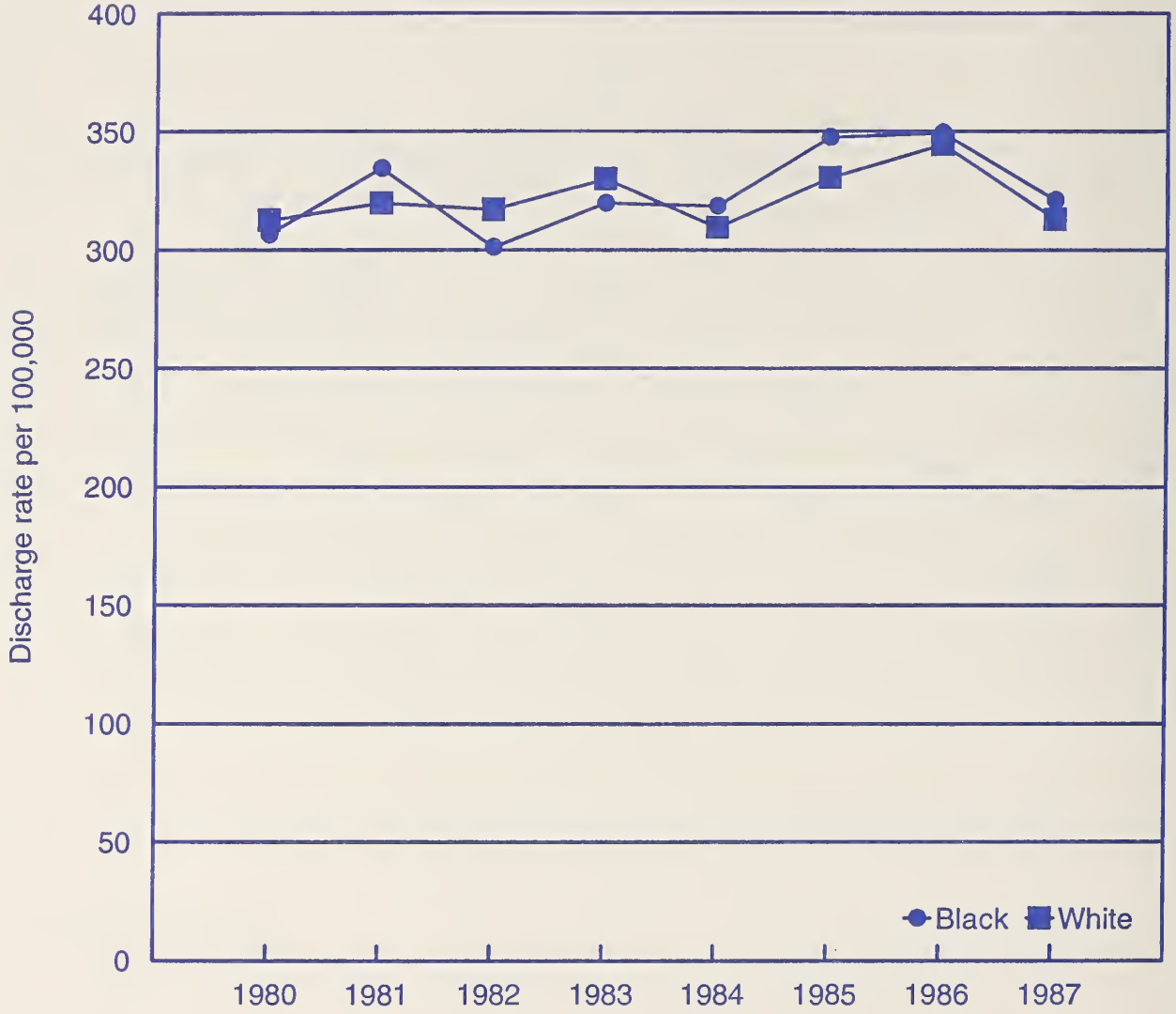
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	22.4 (17.2, 27.5)	26.7 (20.0, 33.5)	24.3 (18.9, 29.7)	22.9 (18.5, 27.4)	26.6 (20.6, 32.5)	24.0 (18.2, 29.8)	24.0 (18.4, 29.5)	28.5 (22.1, 34.8)	1.5 (–1.0, 4.0)
White	24.4 (22.4, 26.5)	23.9 (22.0, 25.7)	26.2 (24.1, 28.2)	27.2 (25.3, 29.1)	24.8 (22.8, 26.9)	22.2 (20.3, 24.0)	22.6 (20.6, 24.6)	20.8 (19.0, 22.6)	–2.3 (–4.5, –0.2)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

100. Pneumonia and influenza



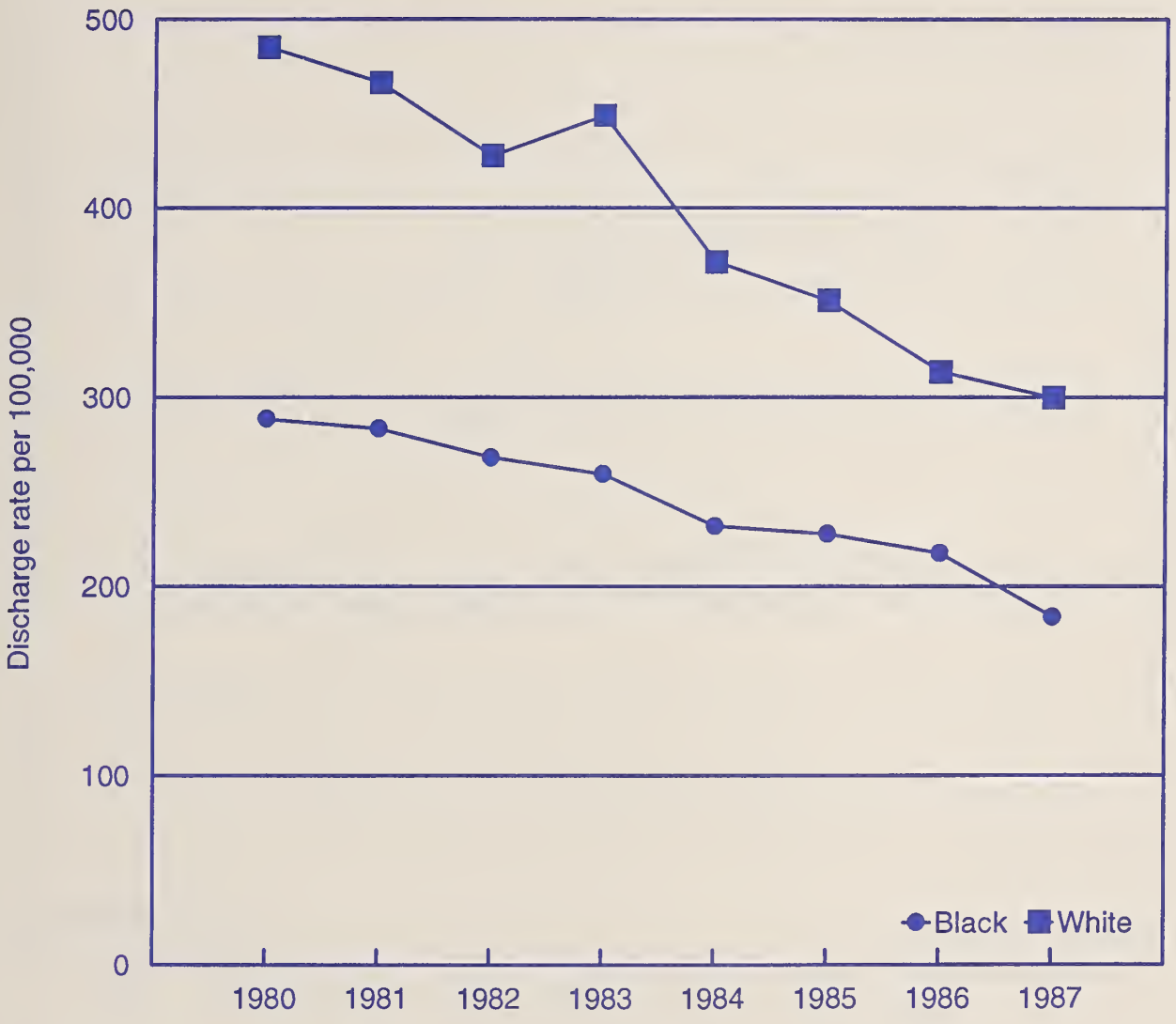
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	306.4 (254.7, 358.0)	334.4 (276.3, 392.6)	301.0 (255.5, 346.5)	319.6 (271.8, 367.5)	318.4 (270.6, 366.1)	347.5 (287.8, 407.2)	349.4 (292.6, 406.2)	320.9 (268.3, 373.4)	1.2 (-0.4, 2.7)
White	312.4 (292.9, 332.0)	319.6 (301.5, 337.8)	316.9 (298.5, 335.4)	329.9 (312.9, 346.9)	309.4 (292.9, 326.0)	330.4 (310.9, 349.9)	344.4 (324.2, 364.7)	312.9 (294.7, 331.2)	0.5 (-0.6, 1.7)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

101. Other respiratory infections (not tuberculosis)



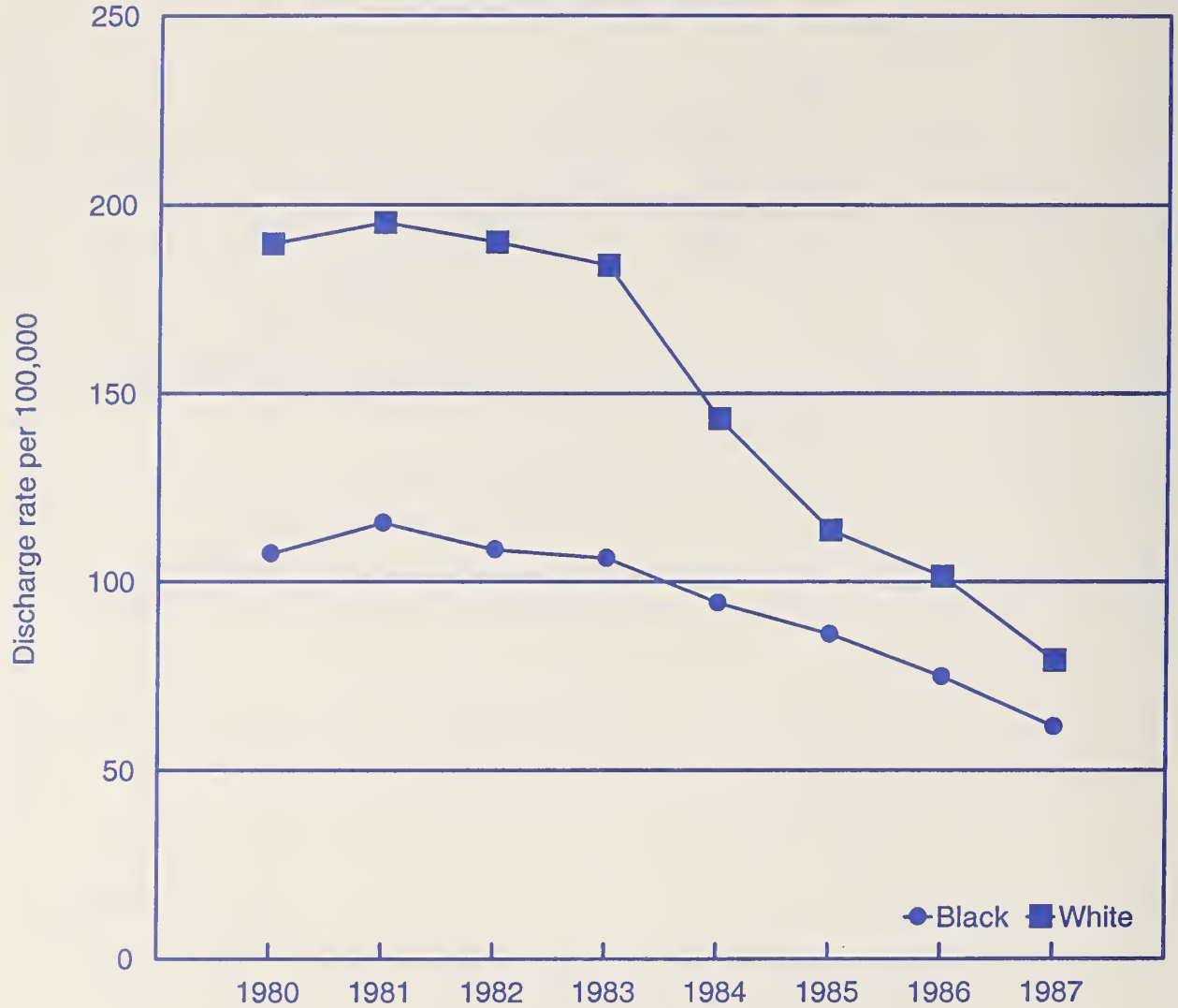
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	288.4 (234.0, 342.8)	283.2 (234.1, 332.3)	267.9 (224.1, 311.7)	259.2 (217.5, 301.0)	231.5 (193.9, 269.1)	227.5 (189.7, 265.3)	217.3 (176.8, 257.8)	183.7 (151.2, 216.1)	-5.9 (-7.0, -4.7)
White	484.9 (443.4, 526.4)	466.1 (430.5, 501.8)	427.2 (393.6, 460.8)	448.7 (415.8, 481.6)	371.3 (342.0, 400.6)	351.0 (324.2, 377.8)	313.4 (287.3, 339.4)	299.8 (273.0, 326.6)	-7.0 (-8.4, -5.7)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

102. Chronic obstructive pulmonary disease and allied conditions



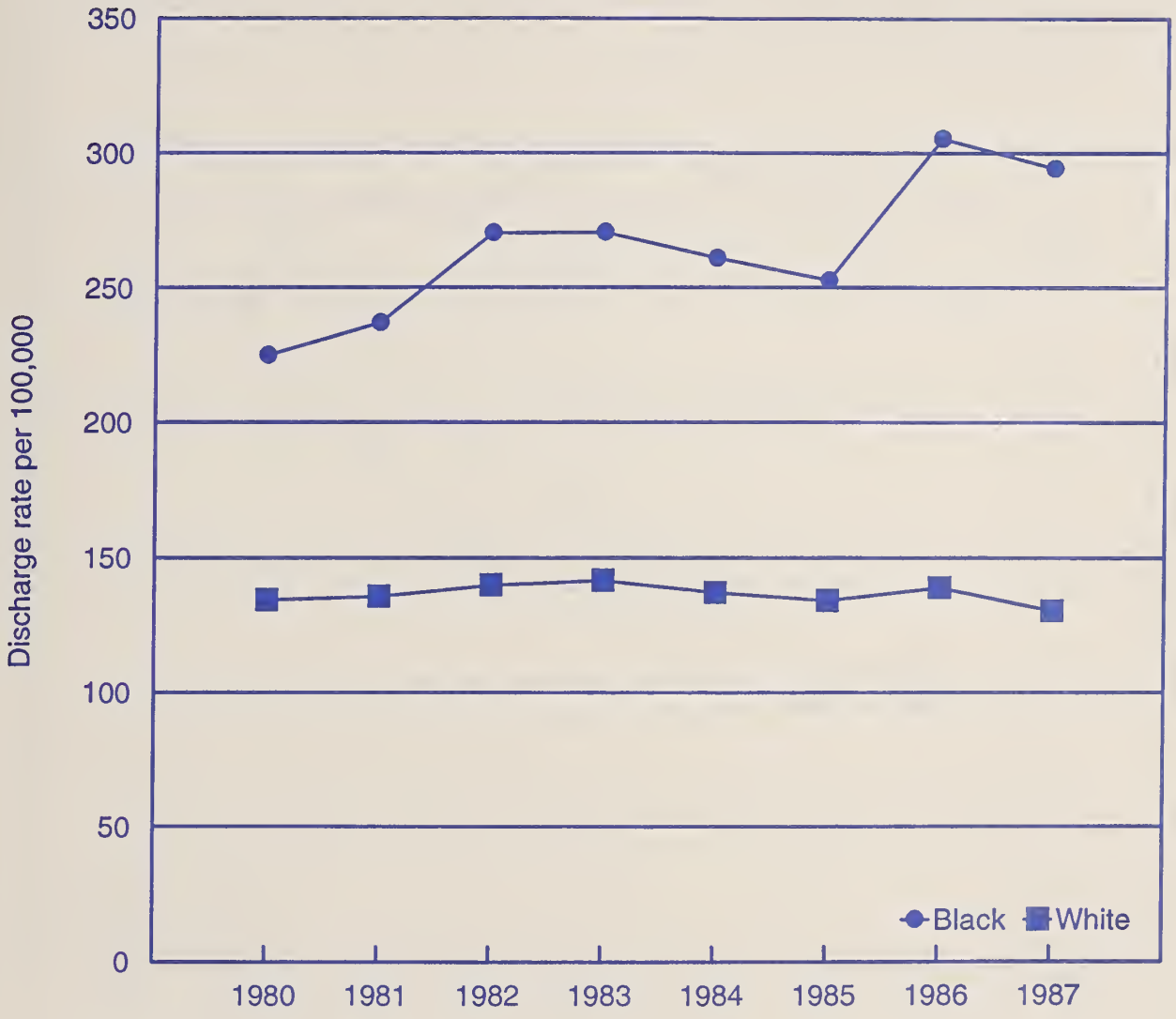
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	107.5 (89.9, 125.2)	115.7 (95.5, 135.8)	108.6 (93.2, 124.0)	106.3 (89.8, 122.8)	94.3 (77.5, 111.1)	86.0 (69.4, 102.6)	74.8 (59.5, 90.1)	61.5 (48.0, 75.0)	-7.9 (-10.4, -5.3)
White	189.5 (176.8, 202.3)	195.2 (183.3, 207.0)	190.0 (179.4, 200.6)	183.8 (172.1, 195.5)	143.3 (132.8, 153.8)	113.7 (105.4, 122.0)	101.4 (93.5, 109.2)	79.1 (72.1, 86.2)	-12.5 (-15.8, -9.0)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

103. Asthma



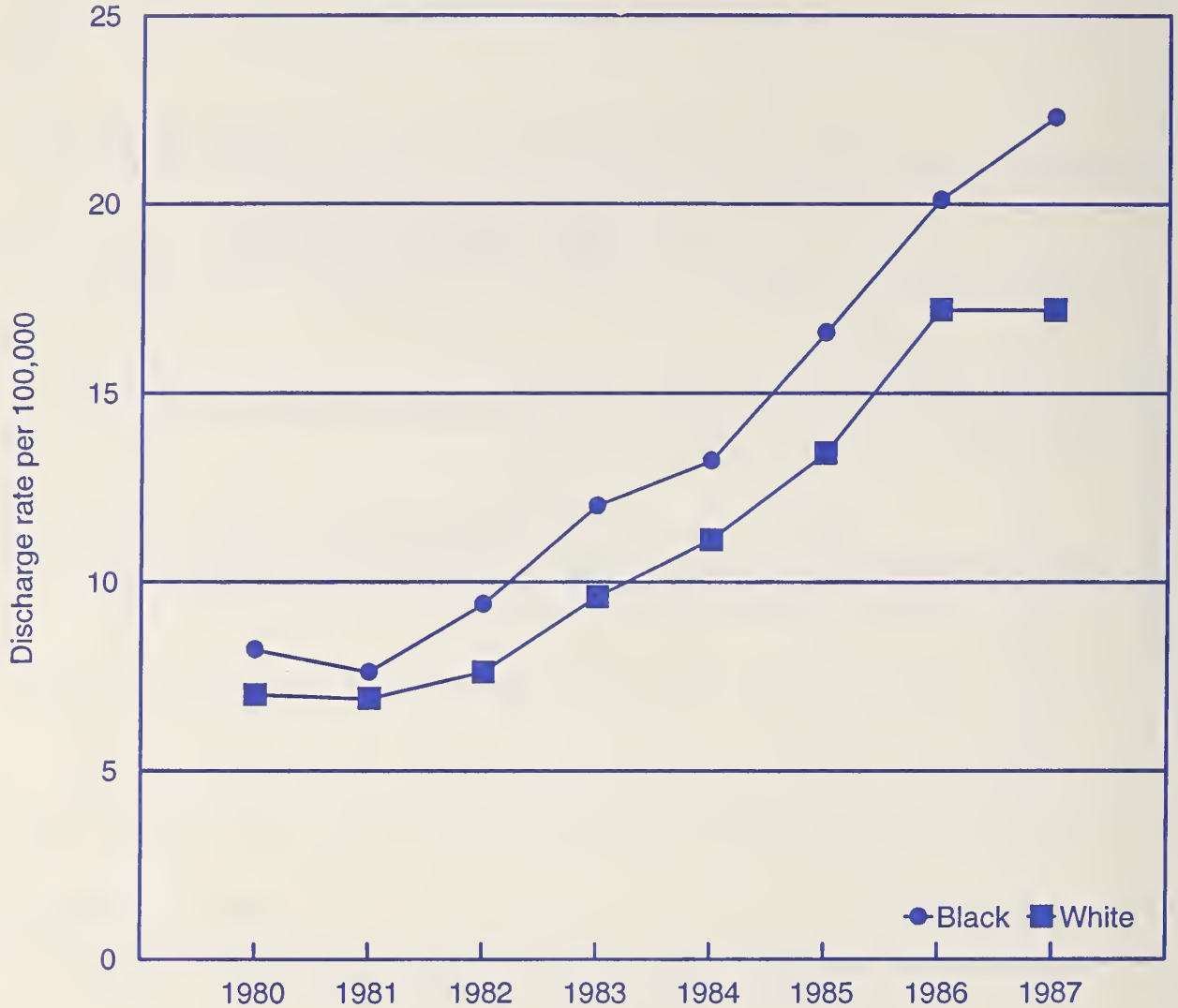
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	224.9 (181.2, 268.6)	237.0 (195.0, 279.0)	270.3 (220.4, 320.3)	270.5 (218.7, 322.3)	260.9 (207.2, 314.5)	252.6 (202.6, 302.6)	305.4 (240.6, 370.2)	294.4 (231.1, 357.8)	3.5 (1.6, 5.5)
White	134.3 (123.5, 145.0)	135.6 (126.4, 144.8)	139.8 (130.0, 149.5)	141.6 (132.3, 150.9)	137.1 (127.2, 146.9)	134.1 (124.6, 143.5)	138.8 (129.1, 148.6)	130.2 (121.2, 139.2)	–0.3 (–1.1, 0.5)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

104. Aspiration pneumonitis, food/vomitus



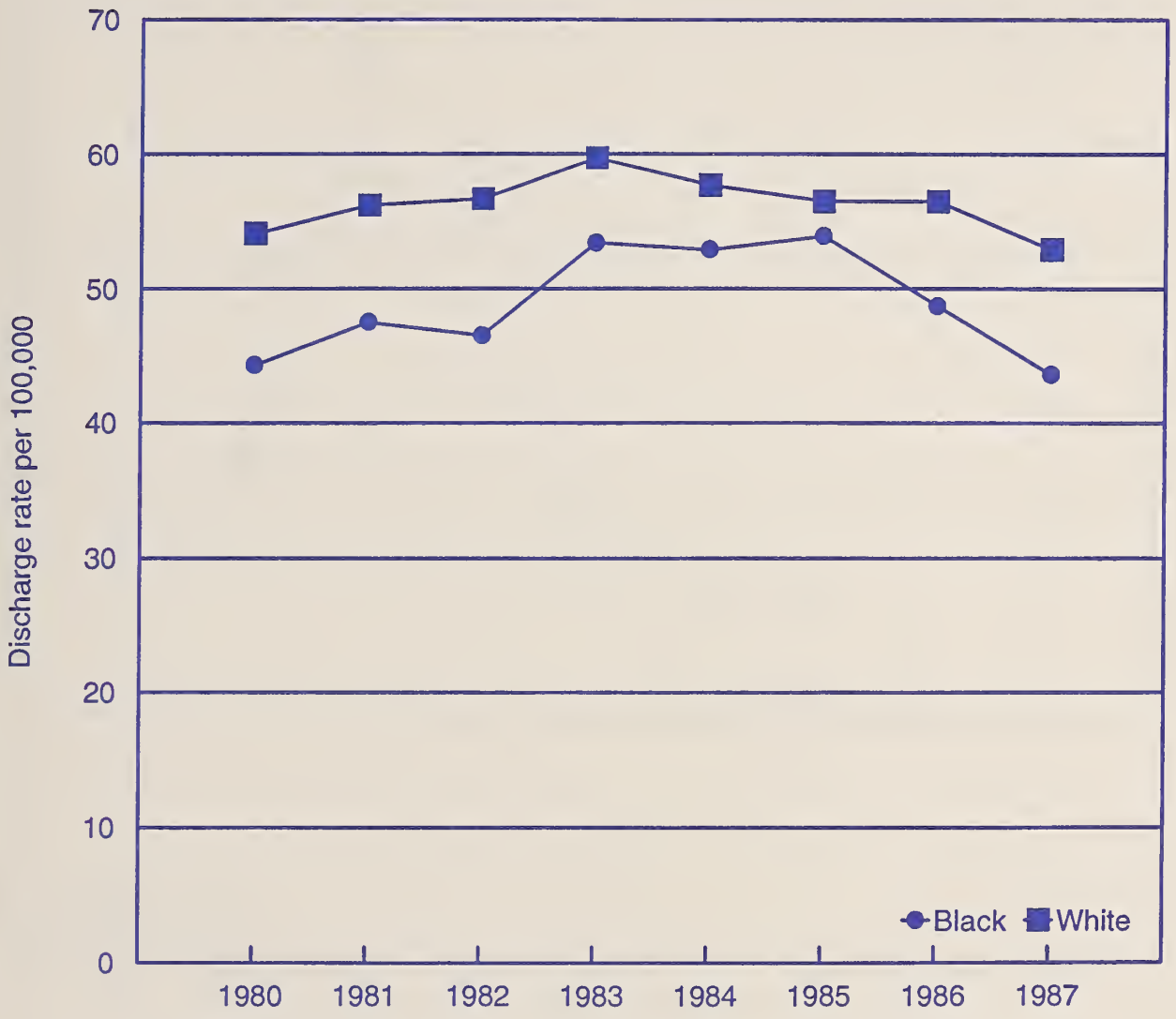
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	8.2 (5.4, 10.9)	7.6 (4.8, 10.4)	9.4 (6.0, 12.7)	12.0 (8.5, 15.5)	13.2 (9.5, 16.8)	16.6 (12.3, 20.8)	20.1 (14.5, 25.7)	22.3 (14.9, 29.6)	17.7 (14.9, 20.6)
White	7.0 (5.8, 8.1)	6.9 (5.8, 7.9)	7.6 (6.6, 8.6)	9.6 (8.5, 10.6)	11.1 (9.9, 12.2)	13.4 (11.9, 15.0)	17.2 (15.3, 19.1)	17.2 (15.1, 19.3)	16.4 (13.6, 19.4)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

105. Pleurisy, pneumothorax, pulmonary collapse



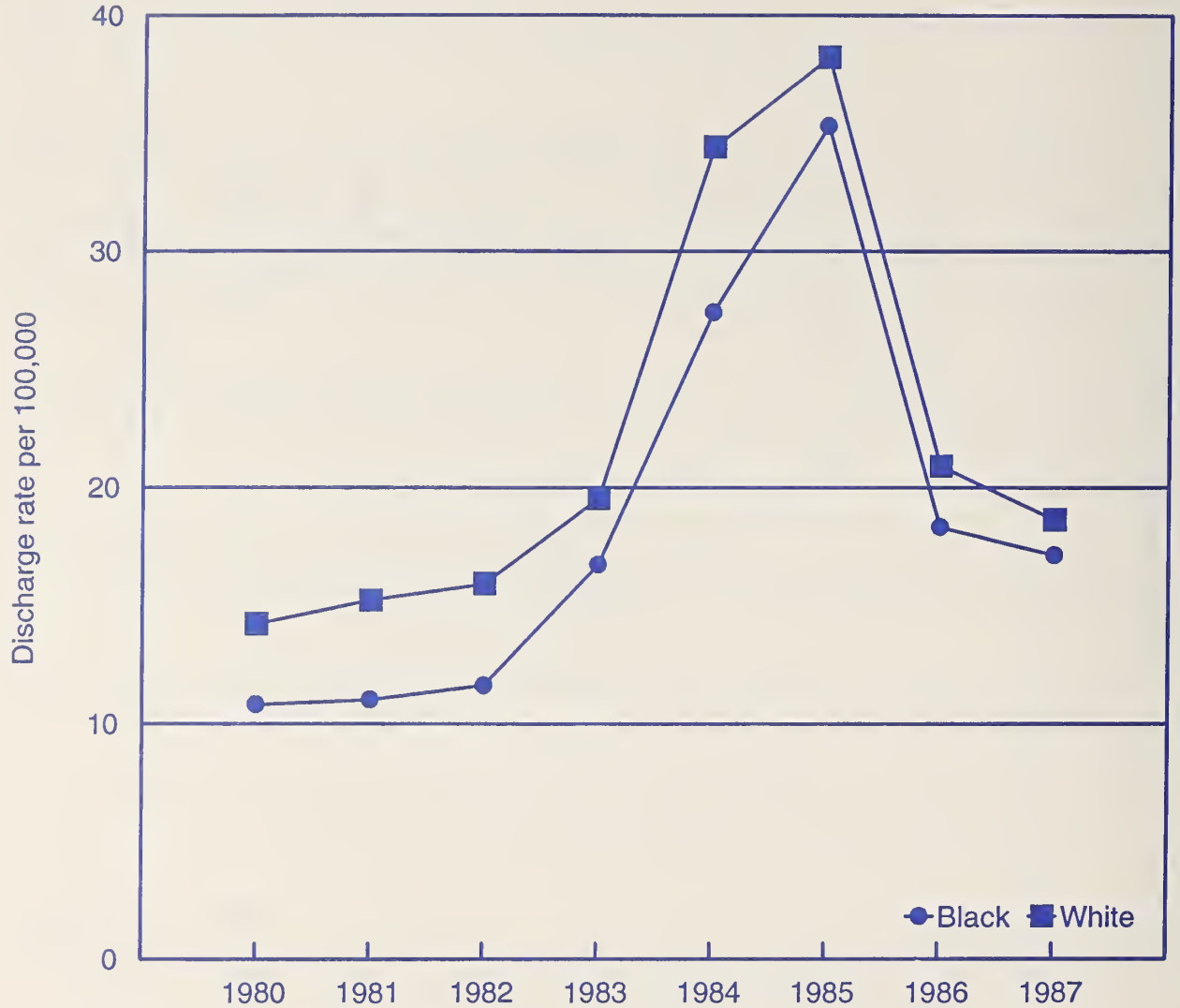
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	44.3 (35.6, 53.1)	47.5 (39.5, 55.5)	46.5 (38.2, 54.9)	53.4 (44.4, 62.4)	52.9 (44.7, 61.1)	53.9 (45.0, 62.9)	48.7 (38.1, 59.2)	43.6 (34.1, 53.0)	0.5 (–2.2, 3.3)
White	54.1 (50.4, 57.8)	56.2 (52.0, 60.5)	56.7 (52.3, 61.2)	59.7 (55.6, 63.9)	57.7 (53.8, 61.6)	56.5 (52.1, 60.9)	56.5 (51.9, 61.1)	52.9 (48.4, 57.5)	–0.2 (–1.4, 1.0)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

106. Respiratory failure/insufficiency (adult)



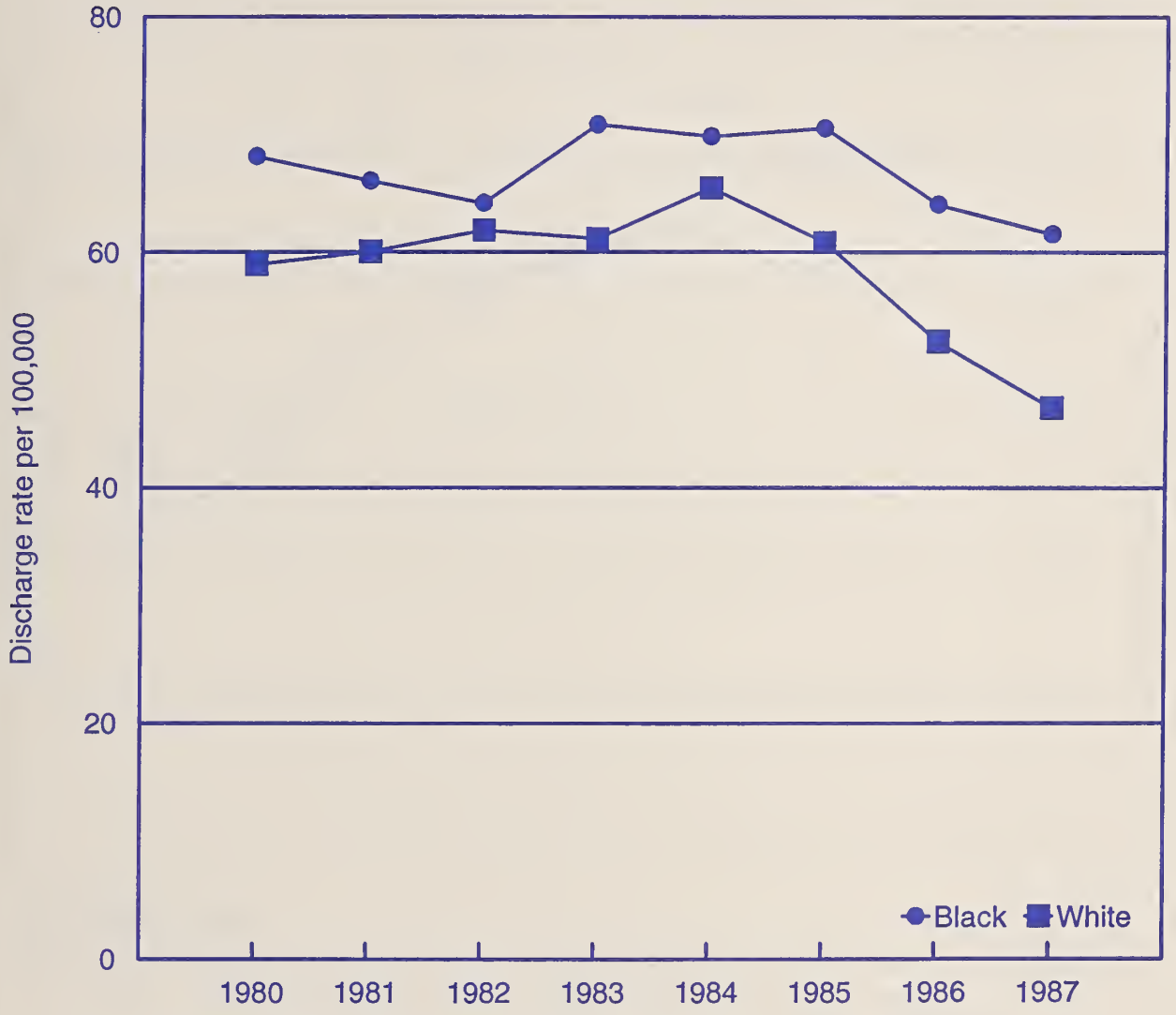
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	10.8 (6.3, 15.4)	11.0 (7.6, 14.3)	11.6 (7.9, 15.3)	16.7 (12.0, 21.3)	27.4 (20.8, 34.0)	35.3 (27.8, 42.9)	18.3 (11.9, 24.6)	17.1 (12.5, 21.6)	12.1 (0.7, 24.9)
White	14.2 (12.6, 15.8)	15.2 (13.4, 16.9)	15.9 (14.3, 17.5)	19.5 (17.5, 21.6)	34.4 (31.3, 37.5)	38.2 (34.2, 42.2)	20.9 (18.5, 23.3)	18.6 (16.6, 20.5)	8.3 (-2.3, 20.0)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

107. Other lower respiratory diseases



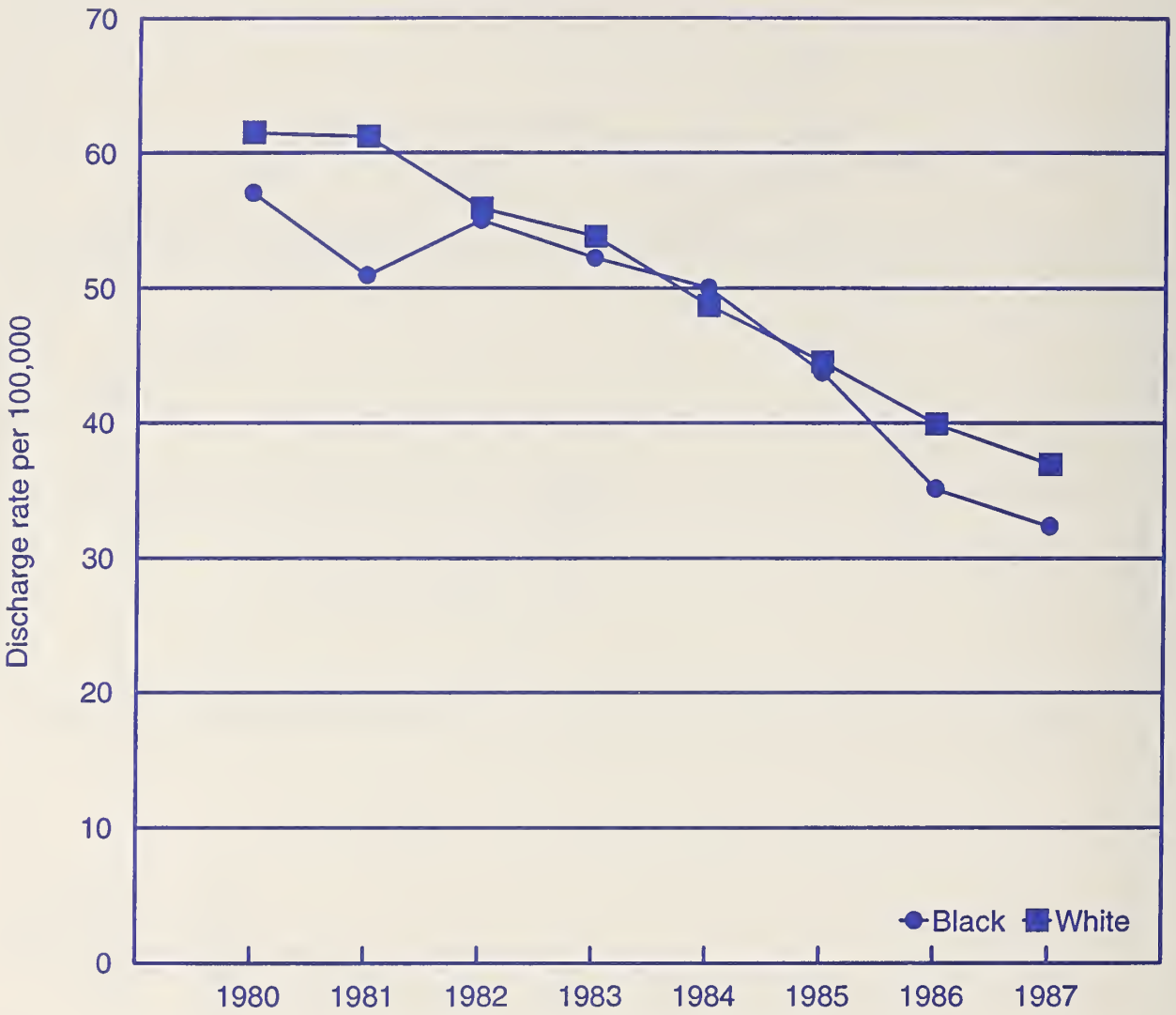
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	68.1 (54.7, 81.5)	66.0 (52.8, 79.2)	64.1 (52.8, 75.4)	70.8 (58.1, 83.4)	69.8 (57.0, 82.6)	70.5 (59.0, 82.0)	64.0 (49.5, 78.6)	61.5 (46.7, 76.3)	-0.7 (-2.3, 0.9)
White	58.9 (54.9, 62.9)	60.0 (56.2, 63.9)	61.8 (57.9, 65.8)	61.1 (56.8, 65.3)	65.4 (60.4, 70.4)	60.8 (55.9, 65.7)	52.4 (48.0, 56.7)	46.8 (42.8, 50.7)	-2.7 (-5.3, -0.1)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

108. Other upper respiratory diseases



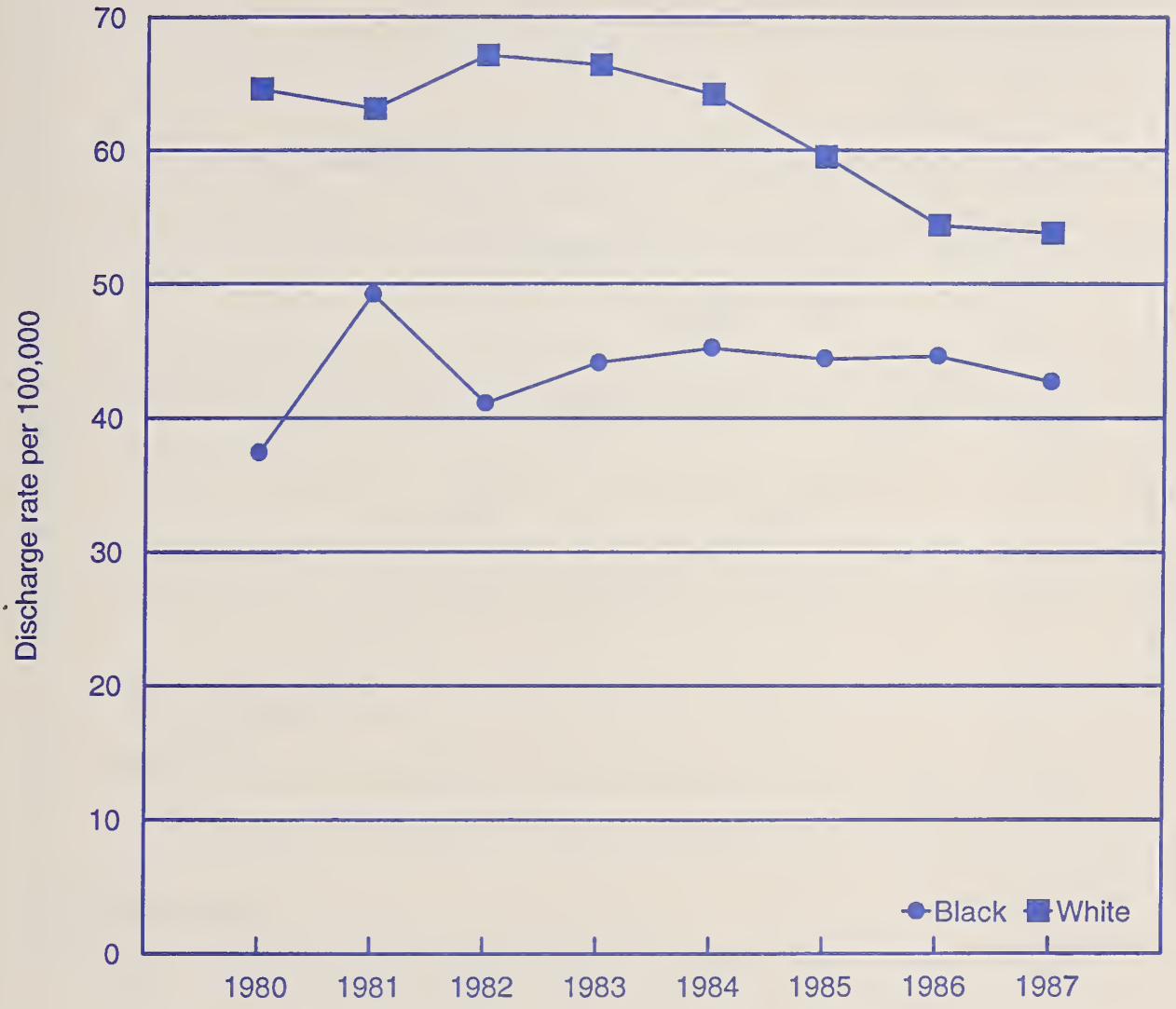
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	57.0 (45.1, 68.8)	50.9 (39.3, 62.5)	55.0 (42.4, 67.5)	52.2 (40.2, 64.2)	50.0 (39.2, 60.8)	43.7 (34.9, 52.6)	35.1 (27.6, 42.7)	32.3 (24.9, 39.7)	-7.5 (-10.2, -4.8)
White	61.5 (55.7, 67.2)	61.2 (55.4, 67.0)	55.9 (50.9, 60.9)	53.8 (48.8, 58.7)	48.7 (43.9, 53.5)	44.5 (39.8, 49.2)	39.9 (34.6, 45.2)	36.9 (30.3, 43.4)	-7.5 (-8.4, -6.5)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

109. Intestinal infections



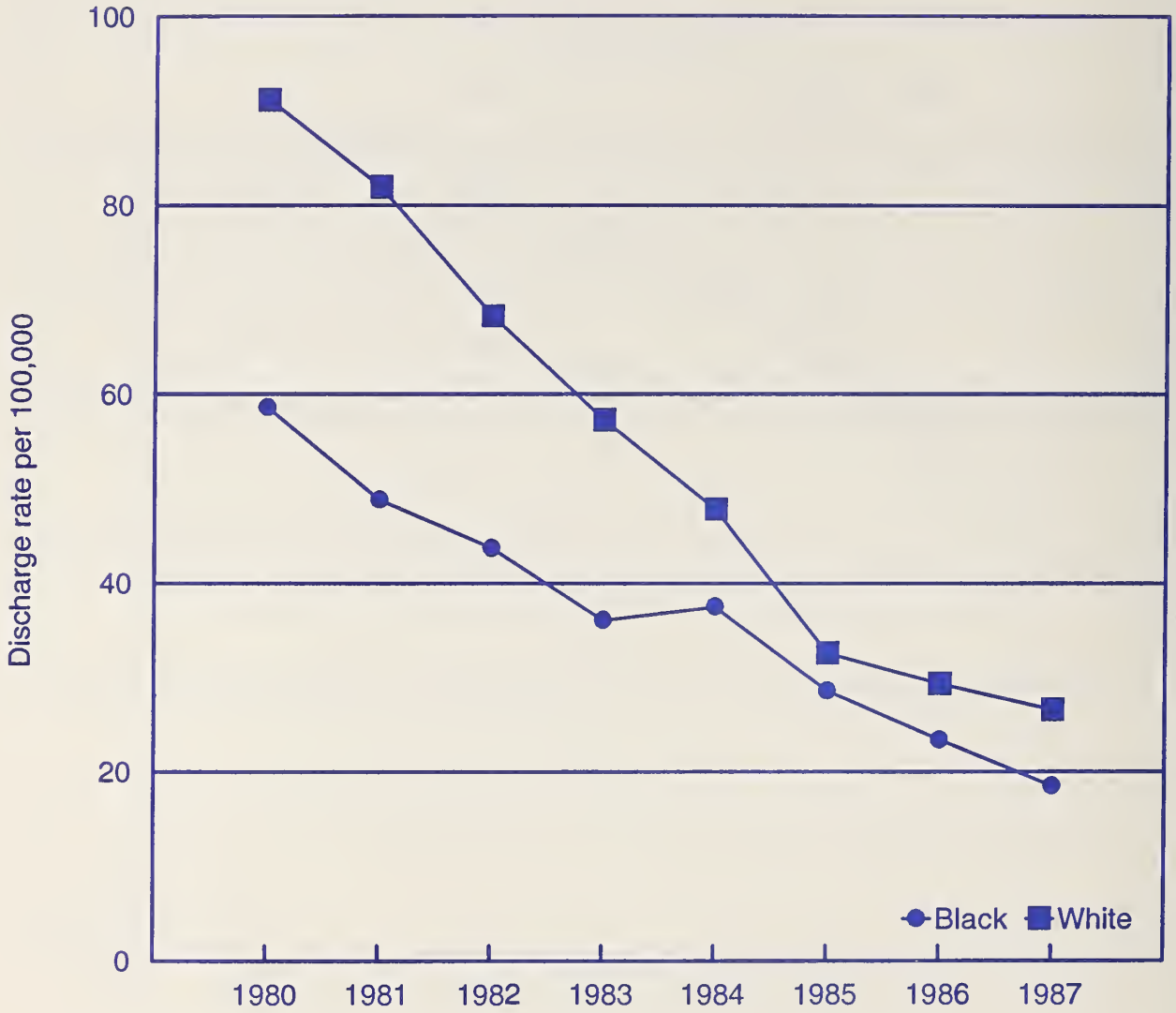
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	37.4 (30.5, 44.3)	49.2 (40.6, 57.7)	41.1 (33.6, 48.6)	44.1 (36.7, 51.6)	45.2 (37.2, 53.2)	44.4 (36.5, 52.2)	44.6 (35.1, 54.1)	42.7 (33.2, 52.2)	0.8 (–1.7, 3.4)
White	64.6 (58.1, 71.0)	63.1 (57.2, 69.0)	67.1 (60.1, 74.0)	66.4 (60.3, 72.5)	64.2 (58.5, 69.9)	59.5 (53.7, 65.3)	54.4 (49.0, 59.8)	53.8 (47.8, 59.8)	–2.8 (–4.4, –1.2)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

110. Disorders of teeth and jaw



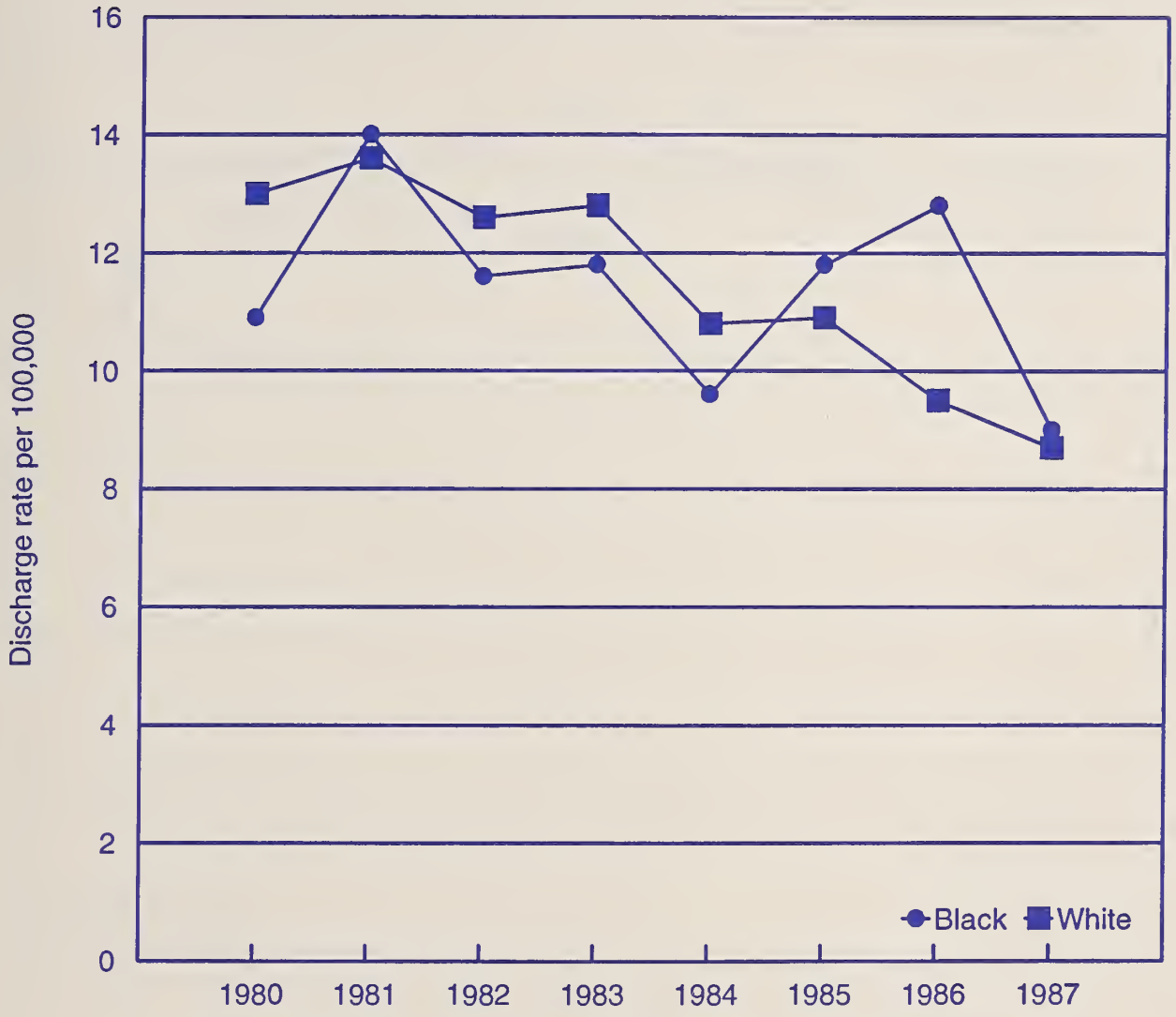
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	58.6 (44.9, 72.4)	48.8 (37.0, 60.7)	43.7 (30.9, 56.5)	36.1 (25.5, 46.6)	37.5 (26.8, 48.2)	28.6 (19.1, 38.0)	23.4 (16.3, 30.6)	18.5 (11.7, 25.3)	-14.3 (-16.3, -12.3)
White	91.1 (76.7, 105.5)	81.9 (68.6, 95.2)	68.2 (57.9, 78.6)	57.3 (47.2, 67.5)	47.8 (39.5, 56.2)	32.6 (26.8, 38.4)	29.4 (24.1, 34.7)	26.6 (20.1, 33.2)	-17.5 (-19.3, -15.6)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

111. Diseases of mouth, excluding dental



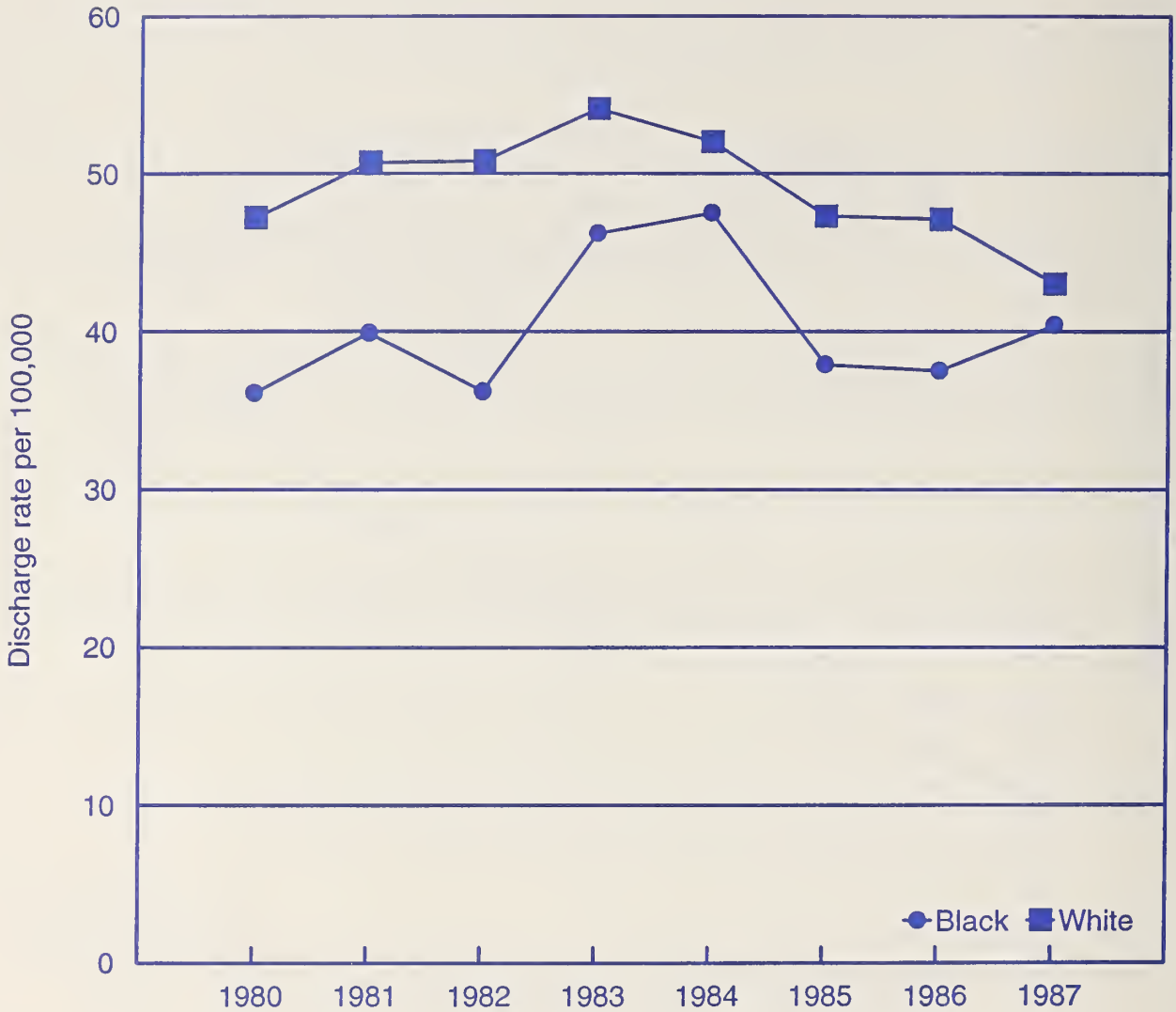
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	10.9 (7.6, 14.3)	14.0 (10.2, 17.7)	11.6 (8.3, 14.9)	11.8 (8.9, 14.8)	9.6 (7.0, 12.2)	11.8 (8.0, 15.5)	12.8 (7.8, 17.7)	9.0 (6.4, 11.6)	-2.3 (-6.4, 1.9)
White	13.0 (11.7, 14.4)	13.6 (12.2, 15.0)	12.6 (11.4, 13.9)	12.8 (11.5, 14.1)	10.8 (9.5, 12.0)	10.9 (9.4, 12.4)	9.5 (7.9, 11.1)	8.7 (7.6, 9.8)	-6.0 (-7.7, -4.3)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

112. Esophageal disorders



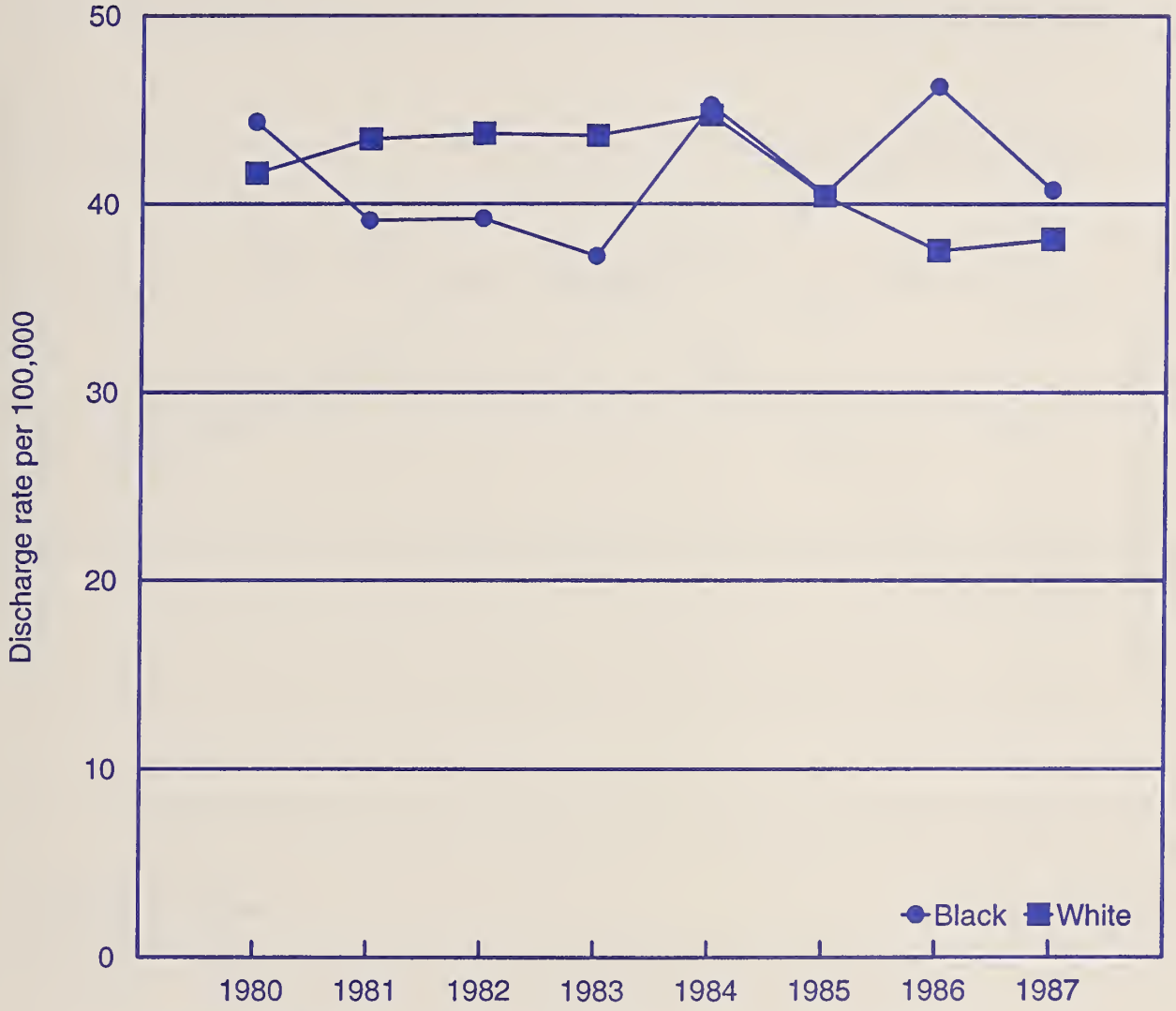
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	36.1 (29.0, 43.2)	39.9 (32.3, 47.5)	36.2 (28.9, 43.5)	46.2 (37.9, 54.4)	47.5 (38.3, 56.7)	37.9 (30.0, 45.8)	37.5 (29.4, 45.5)	40.4 (32.1, 48.8)	0.8 (-2.6, 4.2)
White	47.2 (43.4, 51.0)	50.7 (46.7, 54.8)	50.8 (46.9, 54.7)	54.1 (50.3, 57.9)	52.0 (48.0, 55.9)	47.3 (43.5, 51.0)	47.1 (43.4, 50.8)	43.0 (39.5, 46.6)	-1.5 (-3.5, 0.5)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

113. Gastric ulcer



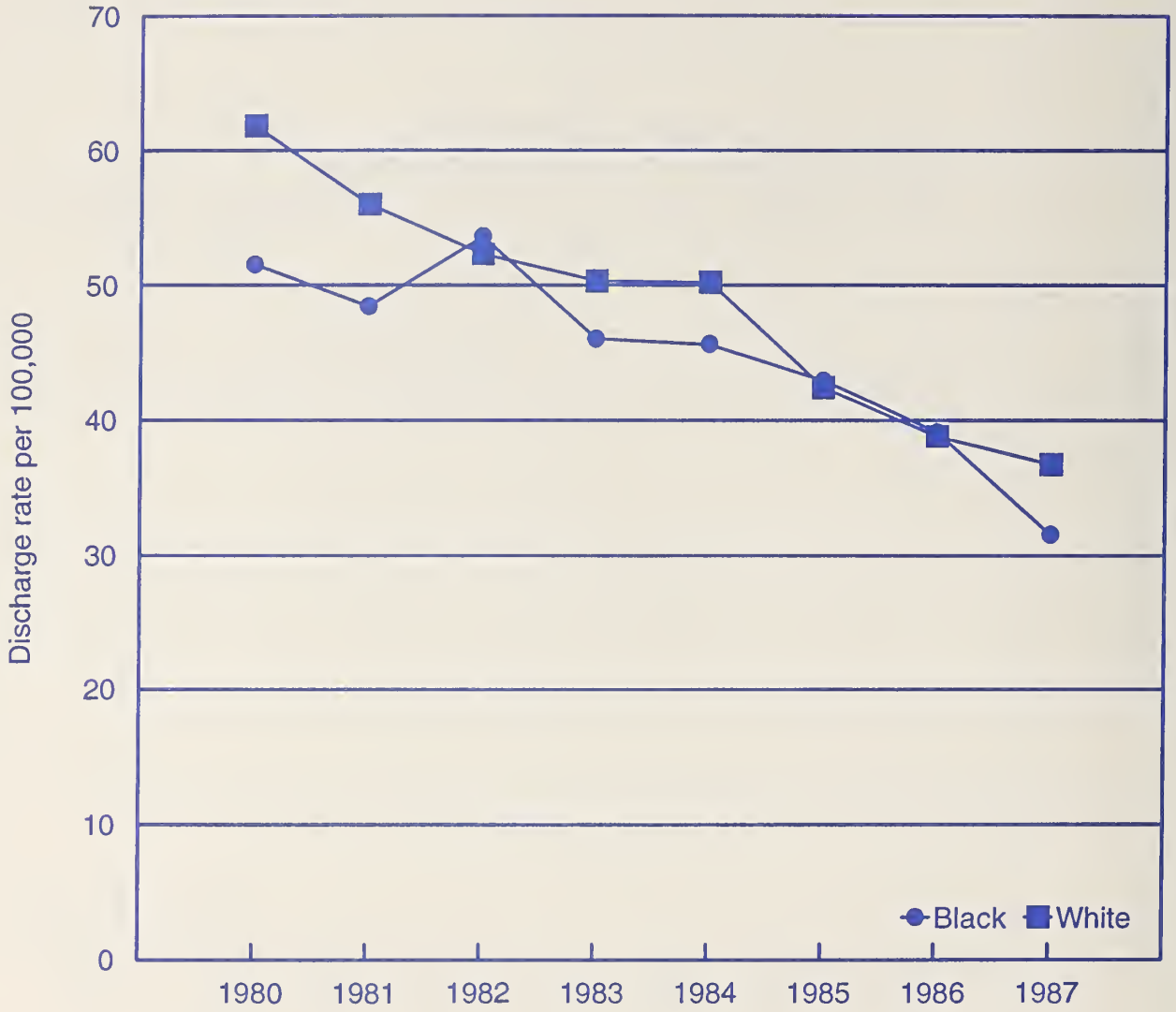
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	44.3 (35.9, 52.8)	39.1 (30.8, 47.4)	39.2 (31.7, 46.7)	37.2 (28.8, 45.7)	45.2 (37.4, 53.0)	40.5 (32.2, 48.9)	46.2 (37.8, 54.7)	40.7 (32.9, 48.4)	0.6 (-1.9, 3.2)
White	41.6 (38.2, 44.9)	43.4 (40.3, 46.4)	43.7 (40.8, 46.7)	43.6 (40.6, 46.5)	44.7 (41.5, 48.0)	40.4 (37.4, 43.4)	37.5 (34.6, 40.4)	38.1 (35.1, 41.1)	-1.8 (-3.4, -0.3)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

114. Duodenal ulcer



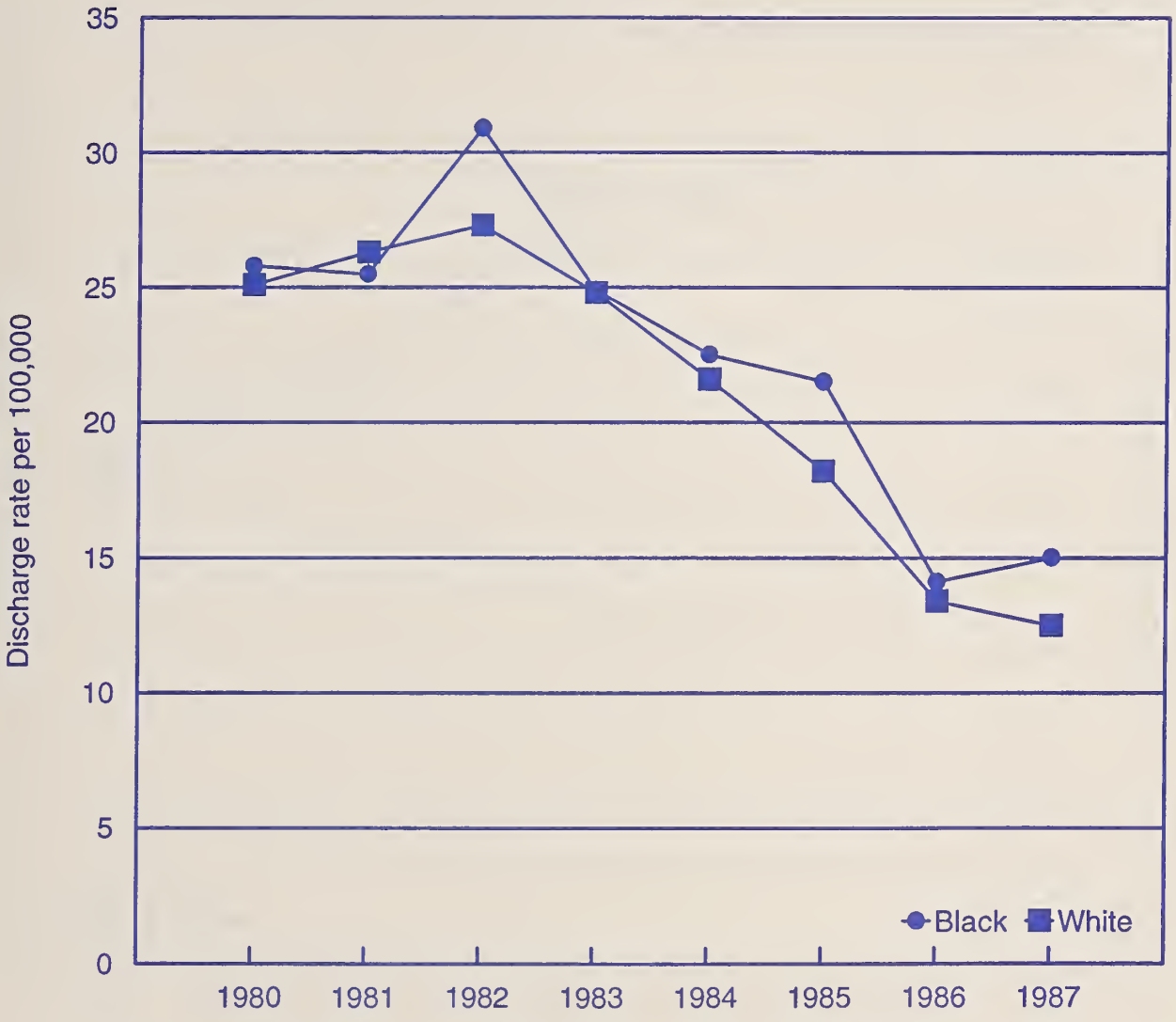
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	51.5 (41.8, 61.1)	48.4 (39.3, 57.4)	53.6 (43.3, 63.9)	46.0 (38.1, 53.9)	45.6 (36.8, 54.5)	42.9 (32.9, 52.9)	39.1 (31.1, 47.2)	31.5 (25.3, 37.7)	-6.0 (-8.3, -3.5)
White	61.8 (56.5, 67.2)	56.0 (51.8, 60.2)	52.3 (48.8, 55.9)	50.3 (46.7, 53.9)	50.2 (46.8, 53.6)	42.4 (39.2, 45.5)	38.8 (35.7, 41.9)	36.7 (33.8, 39.5)	-7.0 (-8.1, -5.9)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

115. Other peptic ulcer



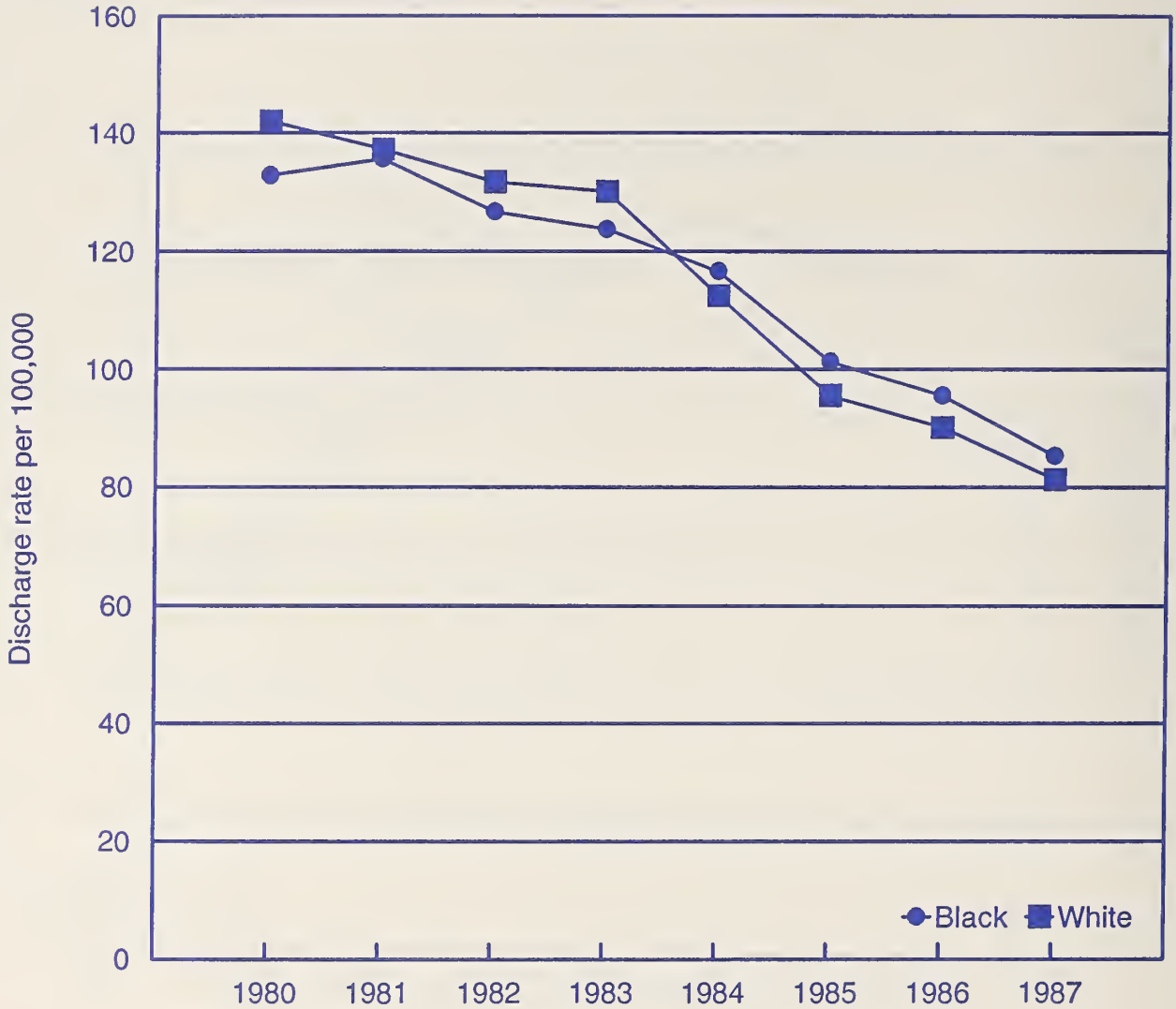
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	25.8 (18.7, 33.0)	25.5 (19.4, 31.5)	30.9 (23.8, 38.0)	24.9 (19.3, 30.4)	22.5 (17.7, 27.3)	21.5 (15.5, 27.6)	14.1 (10.3, 17.8)	15.0 (10.7, 19.4)	-9.0 (-13.2, -4.6)
White	25.1 (22.6, 27.7)	26.3 (23.5, 29.1)	27.3 (24.7, 29.8)	24.8 (22.4, 27.1)	21.6 (19.5, 23.7)	18.2 (16.1, 20.2)	13.4 (11.8, 15.0)	12.5 (10.7, 14.3)	-10.8 (-14.4, -7.1)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

116. Gastritis, upper gastrointestinal obstruction, nausea



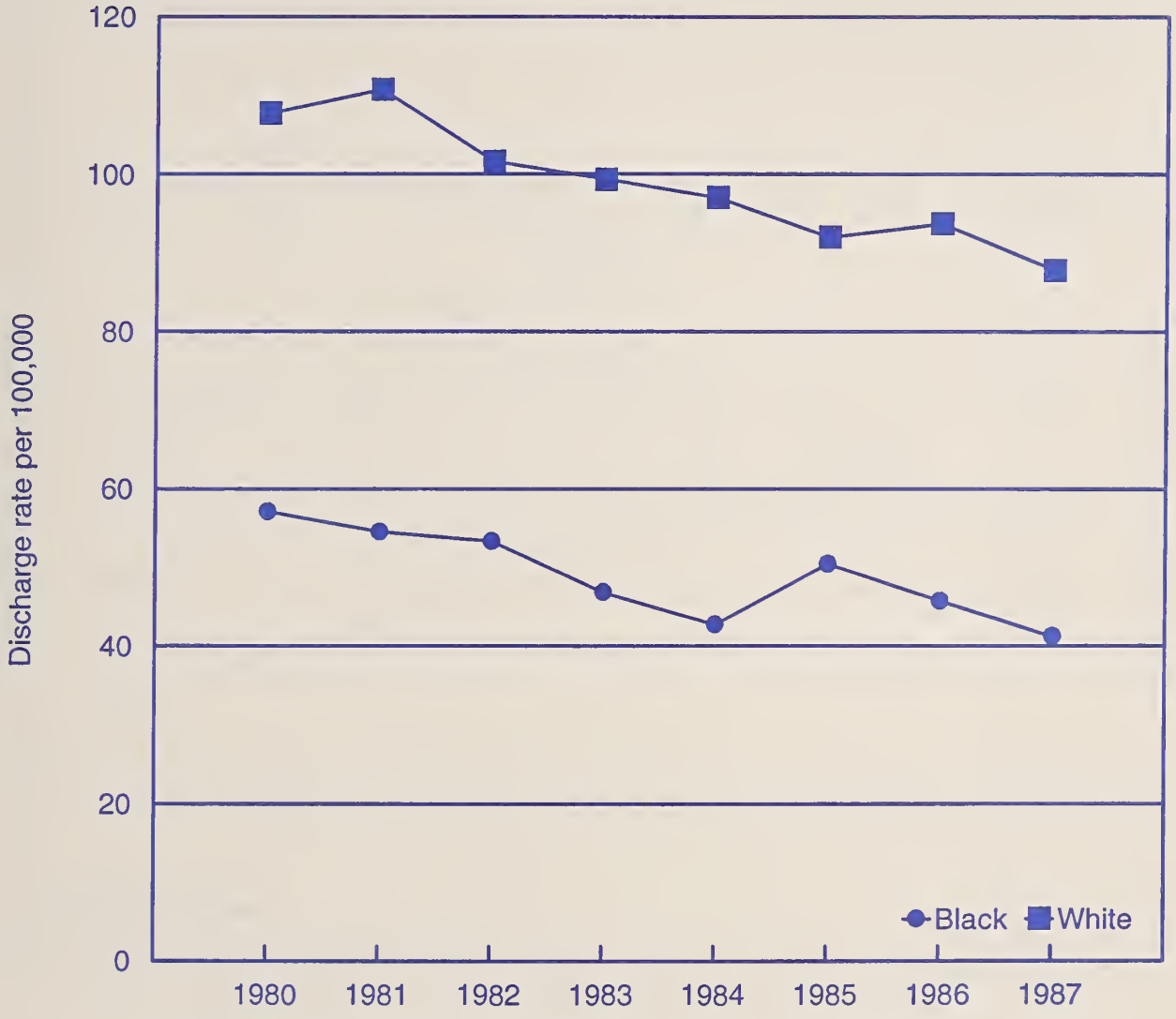
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	132.8 (102.1, 163.4)	135.6 (109.8, 161.3)	126.7 (104.2, 149.1)	123.7 (102.4, 145.0)	116.6 (97.0, 136.1)	101.3 (83.0, 119.7)	95.5 (78.2, 112.7)	85.3 (68.9, 101.7)	-6.4 (-7.8, -5.0)
White	141.9 (131.9, 151.8)	137.2 (127.8, 146.6)	131.7 (122.5, 140.9)	130.1 (122.2, 138.1)	112.5 (105.2, 119.9)	95.5 (88.8, 102.2)	90.1 (83.8, 96.4)	81.3 (75.9, 86.7)	-8.1 (-9.7, -6.5)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

117. Appendicitis



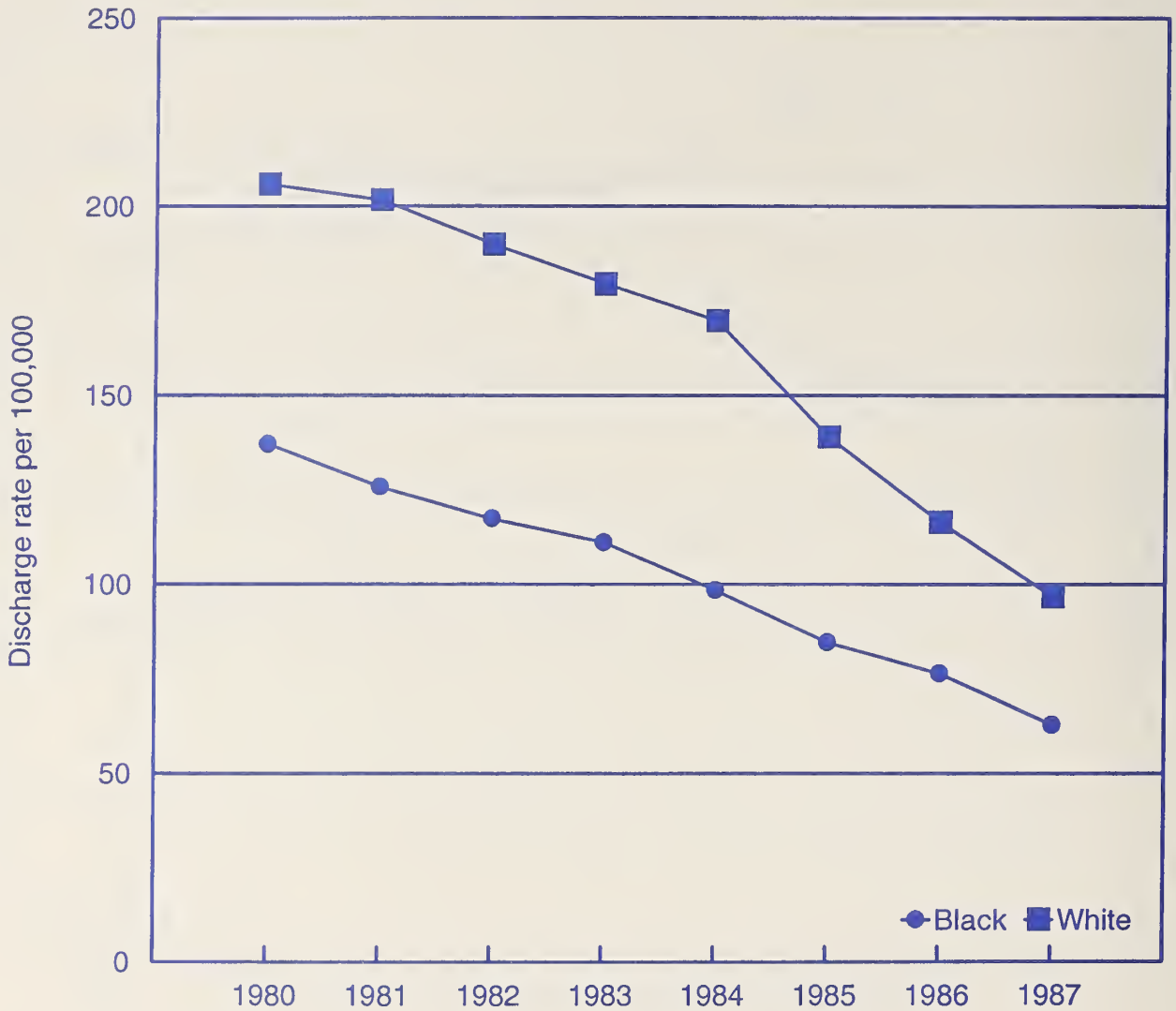
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	57.1 (46.7, 67.5)	54.5 (46.2, 62.7)	53.3 (44.7, 62.0)	46.8 (39.1, 54.5)	42.7 (35.9, 49.4)	50.4 (42.2, 58.6)	45.7 (37.1, 54.4)	41.2 (33.5, 48.9)	–4.0 (–6.0, –2.0)
White	107.7 (100.4, 115.0)	110.7 (103.5, 118.0)	101.6 (94.9, 108.3)	99.3 (93.4, 105.3)	97.0 (91.3, 102.7)	92.0 (85.5, 98.5)	93.7 (87.5, 99.9)	87.8 (81.8, 93.9)	–3.0 (–3.7, –2.3)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

118. Inguinal hernia



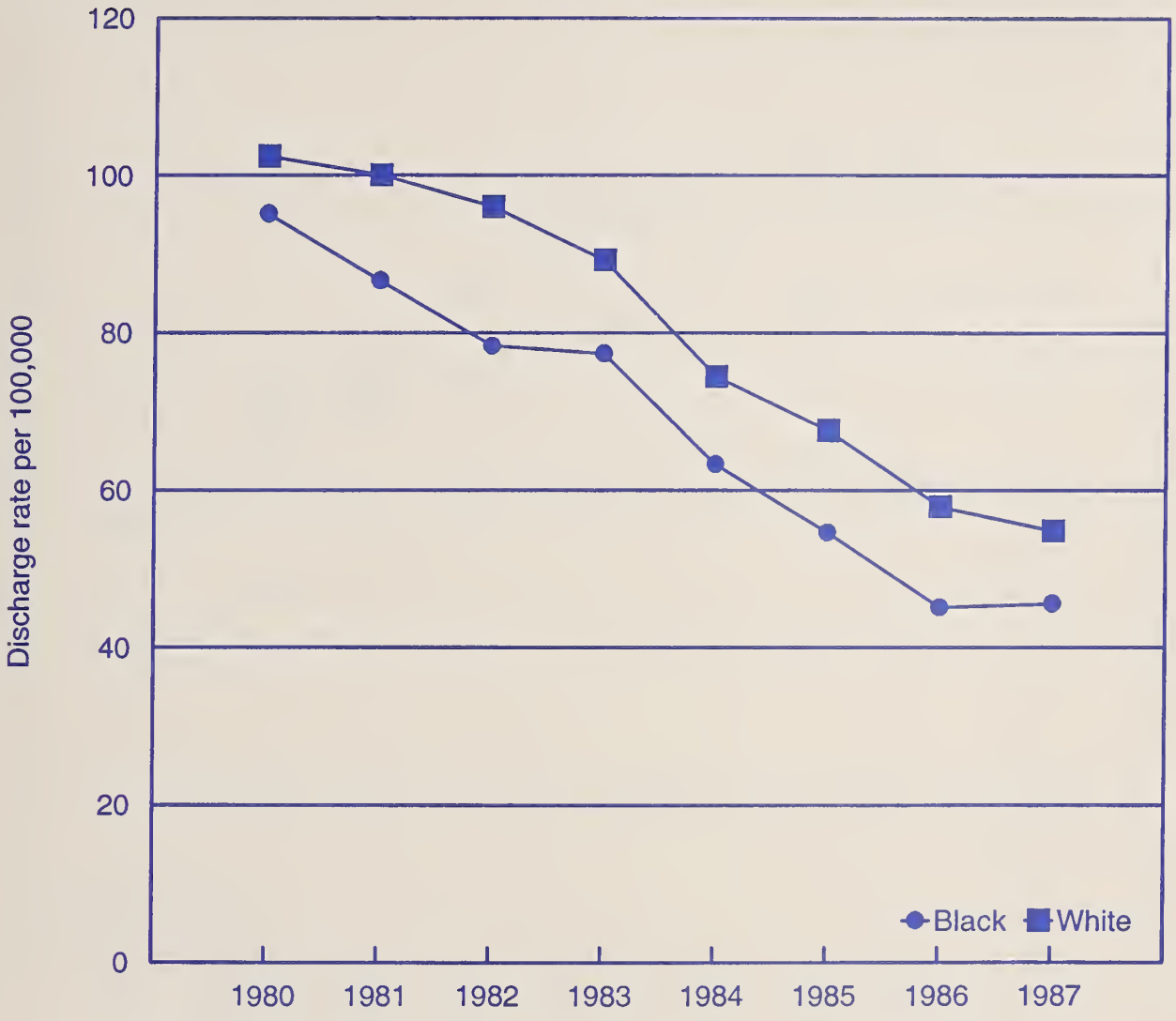
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	137.1 (115.9, 158.3)	125.8 (106.8, 144.8)	117.3 (100.5, 134.0)	111.0 (93.5, 128.4)	98.4 (82.6, 114.2)	84.6 (71.7, 97.5)	76.4 (63.4, 89.3)	62.8 (50.8, 74.8)	**–10.2** (–11.6, –8.8)
White	205.7 (193.7, 217.7)	201.5 (189.9, 213.1)	189.8 (178.0, 201.6)	179.5 (168.9, 190.2)	169.7 (160.2, 179.2)	139.1 (130.0, 148.2)	116.3 (107.5, 125.0)	96.7 (88.8, 104.7)	–10.2 (–12.6, –7.7)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

119. Other abdominal hernia



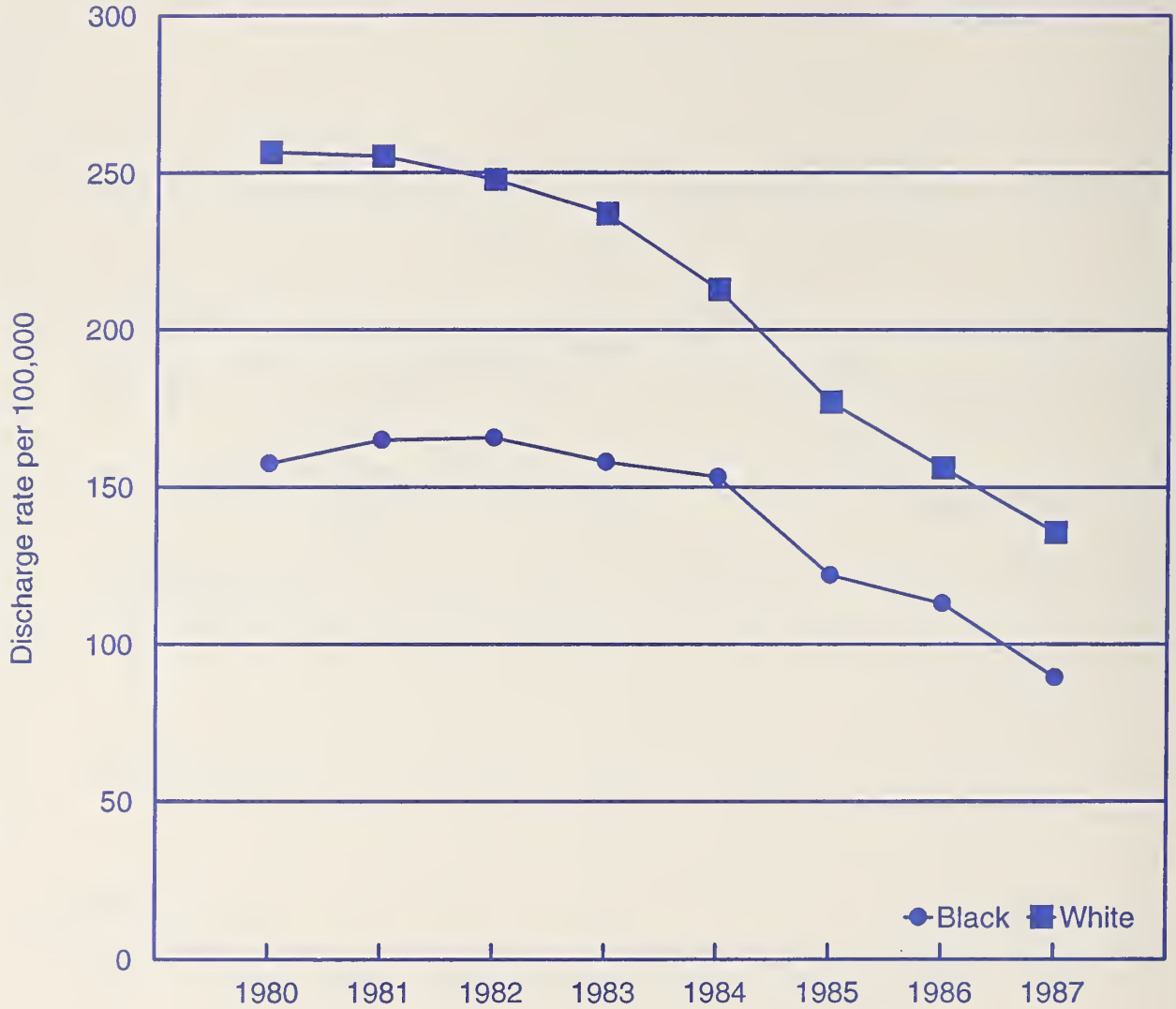
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	95.1 (80.4, 109.8)	86.6 (72.8, 100.3)	78.3 (65.1, 91.5)	77.3 (65.5, 89.1)	63.3 (51.9, 74.7)	54.6 (44.5, 64.8)	45.1 (36.9, 53.4)	45.6 (35.3, 55.9)	-10.9 (-12.5, -9.2)
White	102.4 (95.7, 109.0)	100.0 (92.8, 107.1)	96.0 (89.8, 102.3)	89.2 (83.6, 94.8)	74.4 (69.5, 79.3)	67.6 (62.6, 72.6)	57.9 (53.4, 62.3)	54.8 (50.6, 58.9)	-9.5 (-11.0, -7.9)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

120. Noninfectious enteritis and colitis



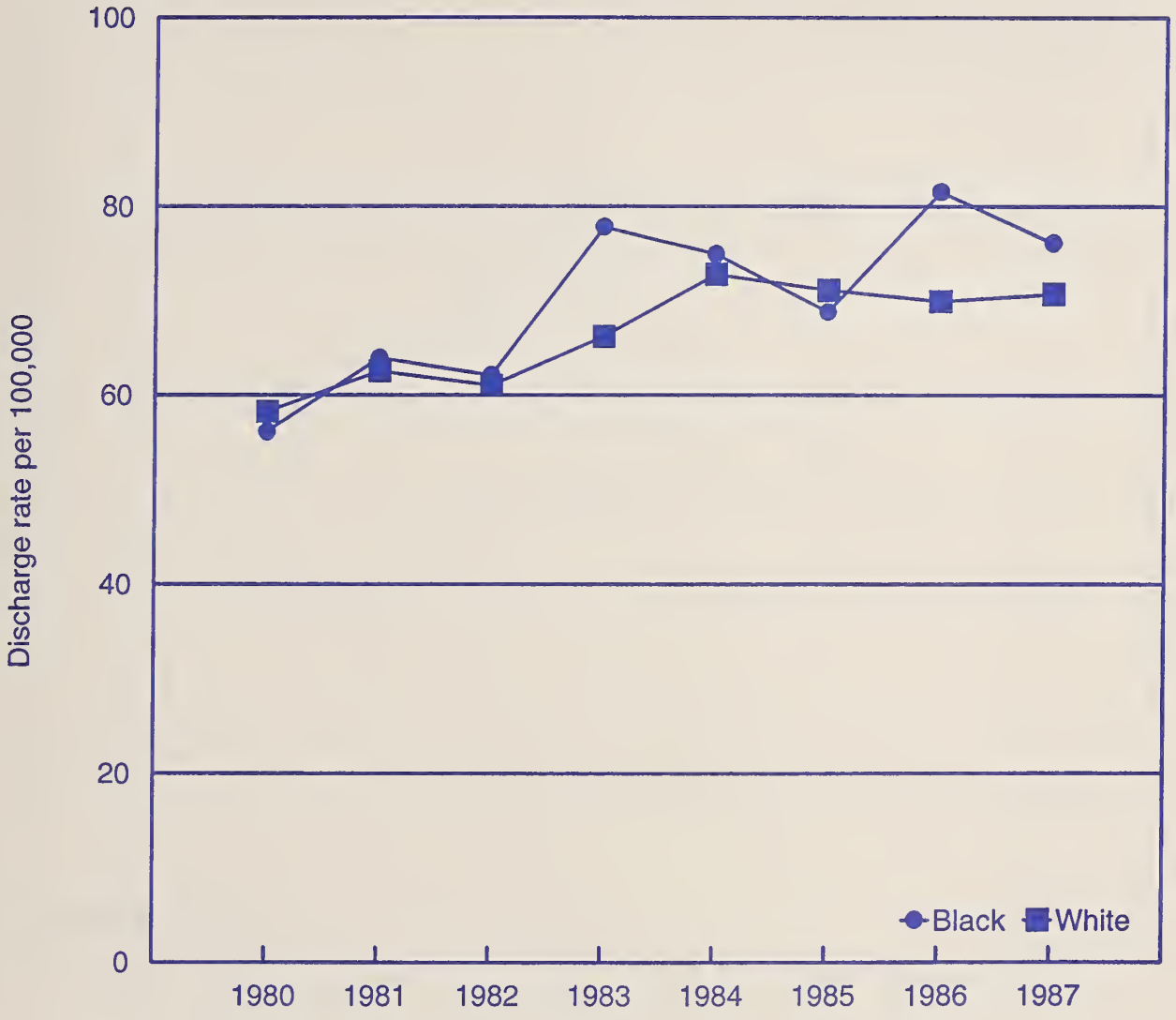
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	157.4 (129.9, 184.8)	164.8 (135.7, 193.9)	165.5 (139.0, 192.0)	157.9 (130.1, 185.7)	153.2 (125.3, 181.0)	122.0 (95.3, 148.7)	113.0 (91.0, 134.9)	89.4 (73.1, 105.6)	-7.8 (-10.9, -4.5)
White	256.4 (238.0, 274.8)	255.1 (238.1, 272.2)	247.7 (229.4, 265.9)	236.8 (222.1, 251.5)	212.7 (200.0, 225.5)	176.8 (163.9, 189.7)	156.1 (142.1, 170.2)	135.5 (124.6, 146.4)	-9.1 (-11.3, -6.9)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

121. Intestinal obstruction without hernia



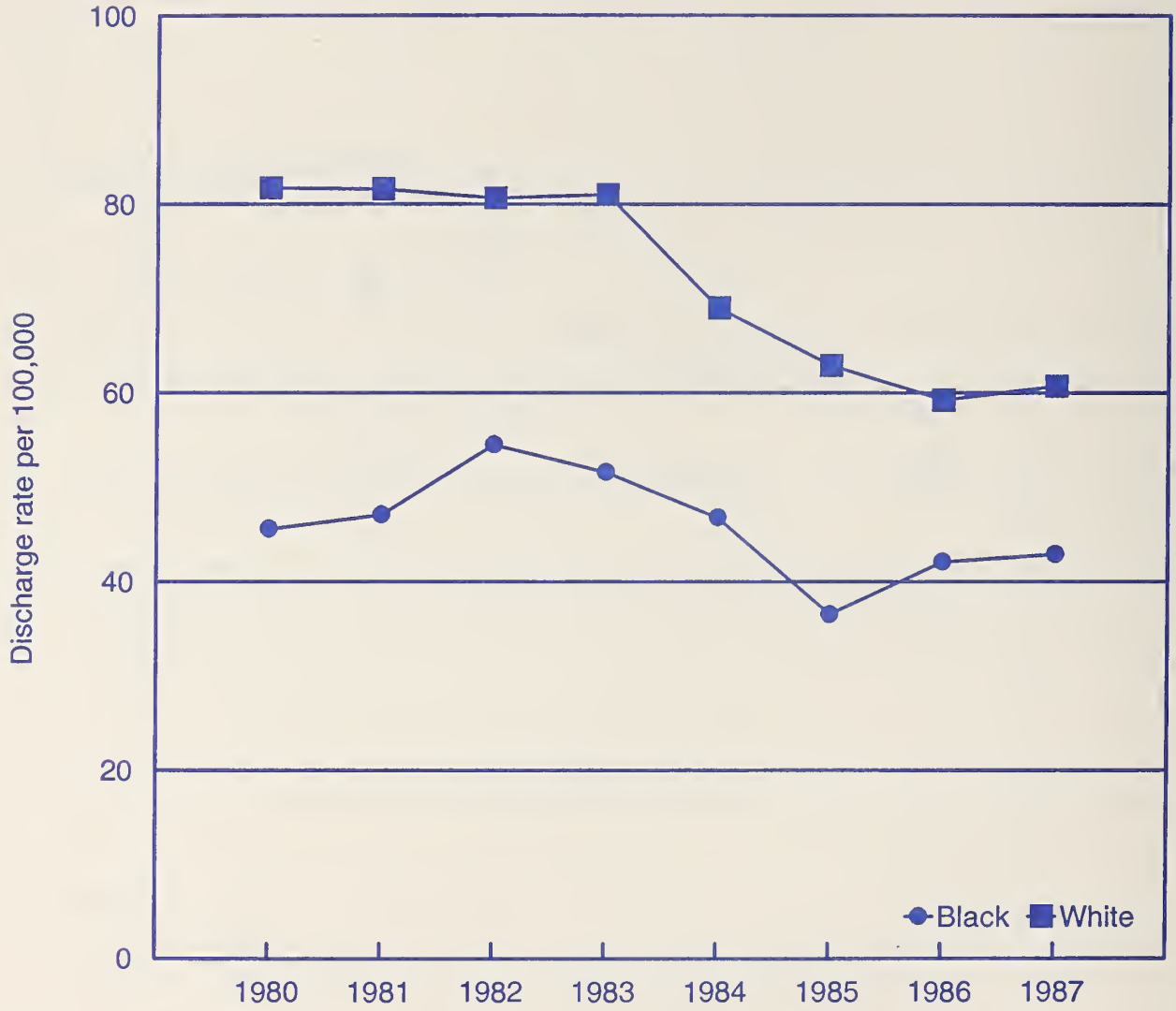
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	56.1 (46.3, 65.9)	63.9 (53.1, 74.8)	62.1 (52.5, 71.7)	77.8 (65.0, 90.5)	74.9 (62.7, 87.1)	68.8 (57.2, 80.3)	81.5 (66.9, 96.1)	76.1 (63.1, 89.1)	4.4 (1.9, 7.0)
White	58.2 (54.8, 61.6)	62.5 (58.5, 66.6)	61.0 (57.3, 64.7)	66.2 (62.3, 70.1)	72.8 (68.7, 77.0)	71.1 (66.8, 75.4)	69.9 (65.6, 74.2)	70.7 (66.3, 75.2)	3.0 (1.6, 4.4)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

122. Diverticulosis and diverticulitis



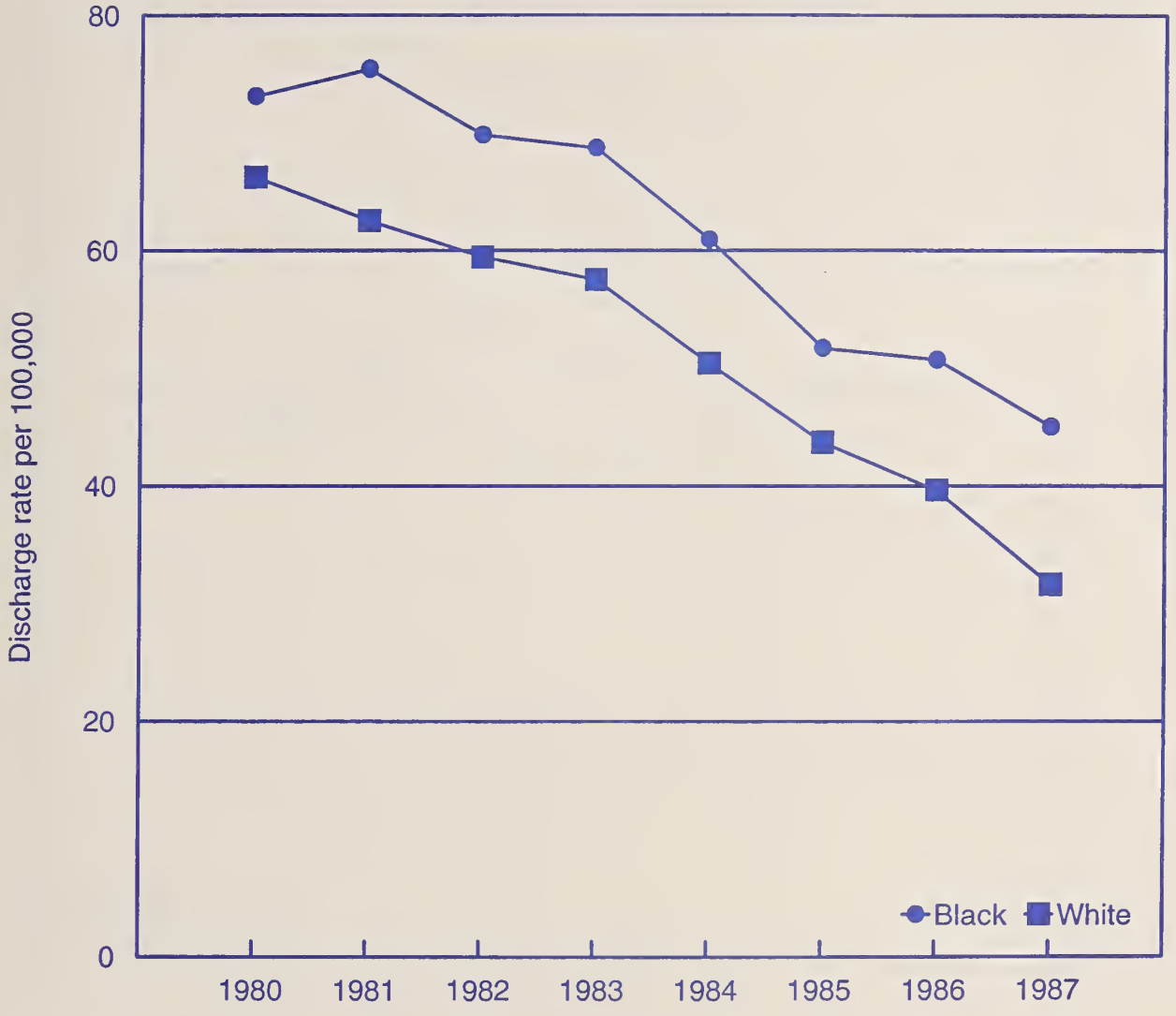
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	45.6 (36.1, 55.0)	47.1 (37.2, 57.0)	54.5 (44.6, 64.3)	51.6 (43.0, 60.3)	46.8 (36.9, 56.6)	36.5 (29.1, 43.9)	42.1 (31.9, 52.2)	42.9 (34.3, 51.5)	-2.7 (-6.0, 0.7)
White	81.7 (76.5, 86.8)	81.6 (76.7, 86.5)	80.6 (75.9, 85.3)	81.0 (76.1, 85.9)	69.0 (64.7, 73.3)	62.9 (58.8, 66.9)	59.2 (54.9, 63.4)	60.7 (55.8, 65.5)	-5.3 (-7.0, -3.6)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

123. Anal and rectal conditions



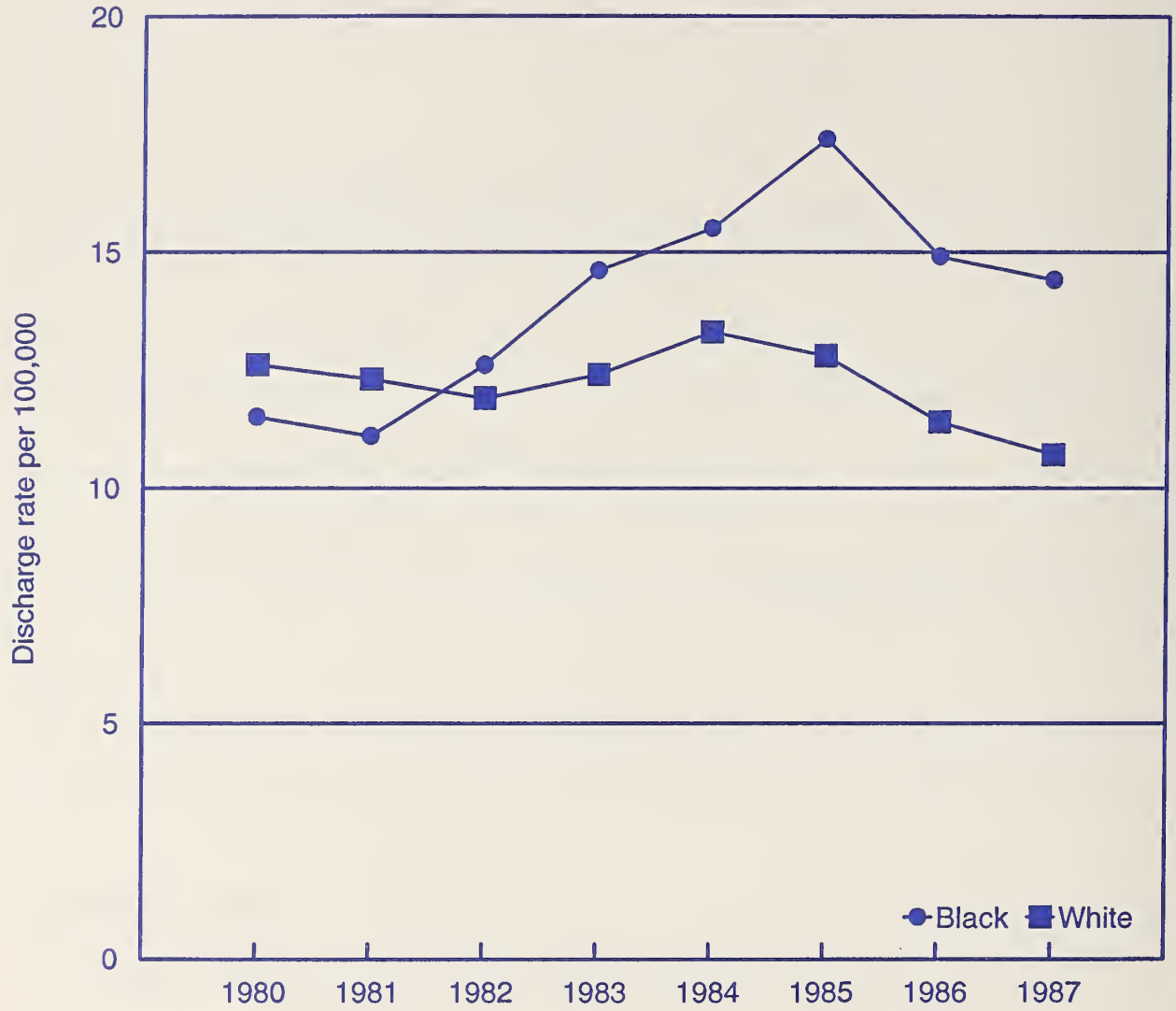
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	73.1 (59.0, 87.2)	75.4 (62.9, 87.9)	69.8 (57.5, 82.0)	68.7 (57.7, 79.6)	60.9 (50.6, 71.3)	51.7 (42.1, 61.3)	50.7 (39.1, 62.3)	45.0 (34.9, 55.0)	-7.3 (-9.0, -5.7)
White	66.2 (60.8, 71.6)	62.5 (57.8, 67.2)	59.4 (54.7, 64.1)	57.5 (53.3, 61.6)	50.4 (46.7, 54.1)	43.7 (40.2, 47.2)	39.6 (35.6, 43.6)	31.6 (28.4, 34.8)	-9.6 (-11.5, -7.7)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

124. Peritonitis, intestinal abscess, and other disorders of peritoneum



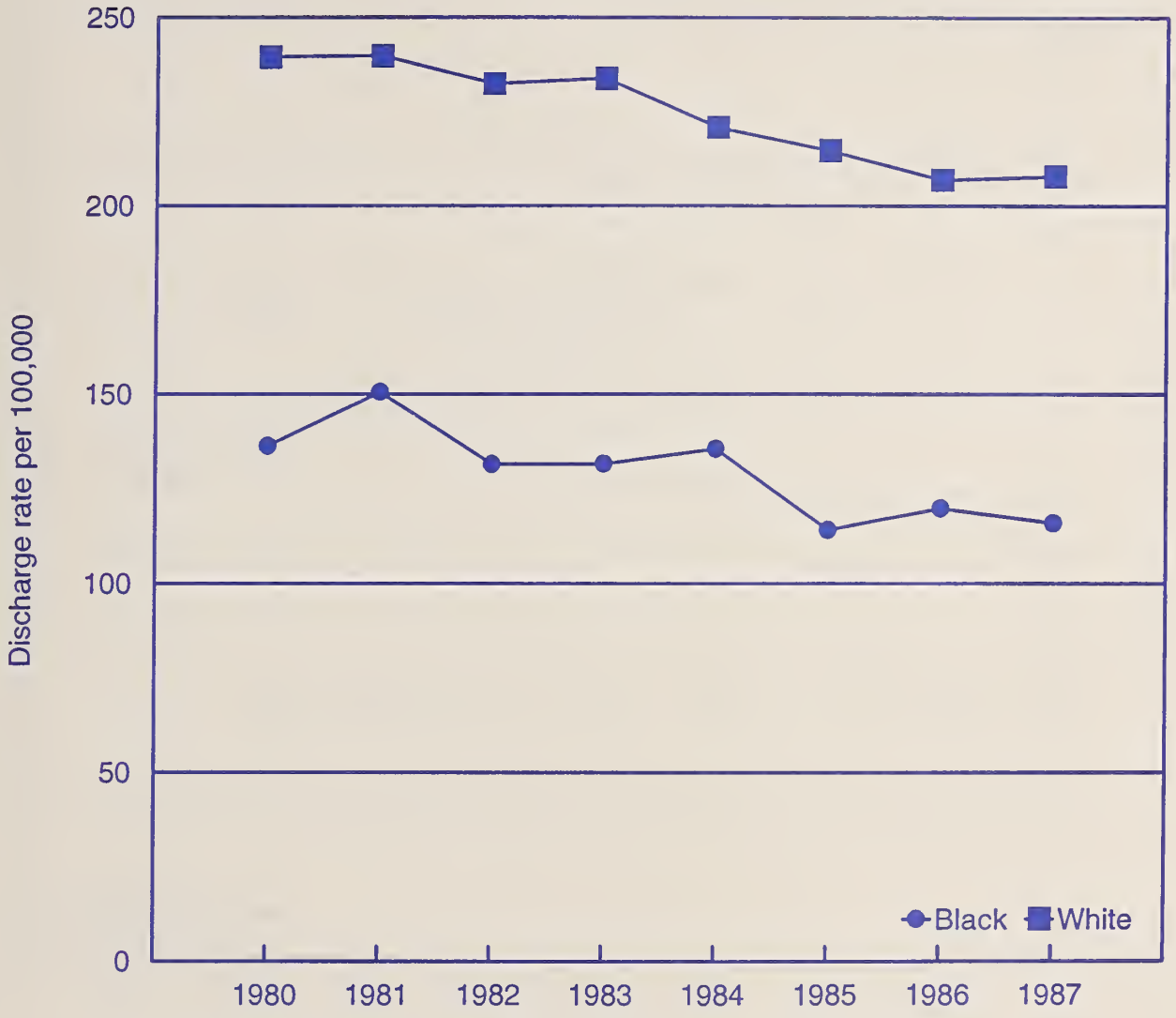
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	11.5 (7.9, 15.1)	11.1 (8.1, 14.0)	12.6 (8.9, 16.3)	14.6 (10.8, 18.4)	15.5 (11.1, 19.9)	17.4 (12.8, 22.1)	14.9 (10.7, 19.0)	14.4 (9.9, 19.0)	5.0 (1.7, 8.5)
White	12.6 (11.3, 13.9)	12.3 (11.1, 13.6)	11.9 (10.8, 13.1)	12.4 (11.0, 13.8)	13.3 (11.9, 14.8)	12.8 (11.5, 14.2)	11.4 (9.9, 12.9)	10.7 (9.5, 11.9)	–1.5 (–3.4, 0.5)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

125. Biliary tract disease



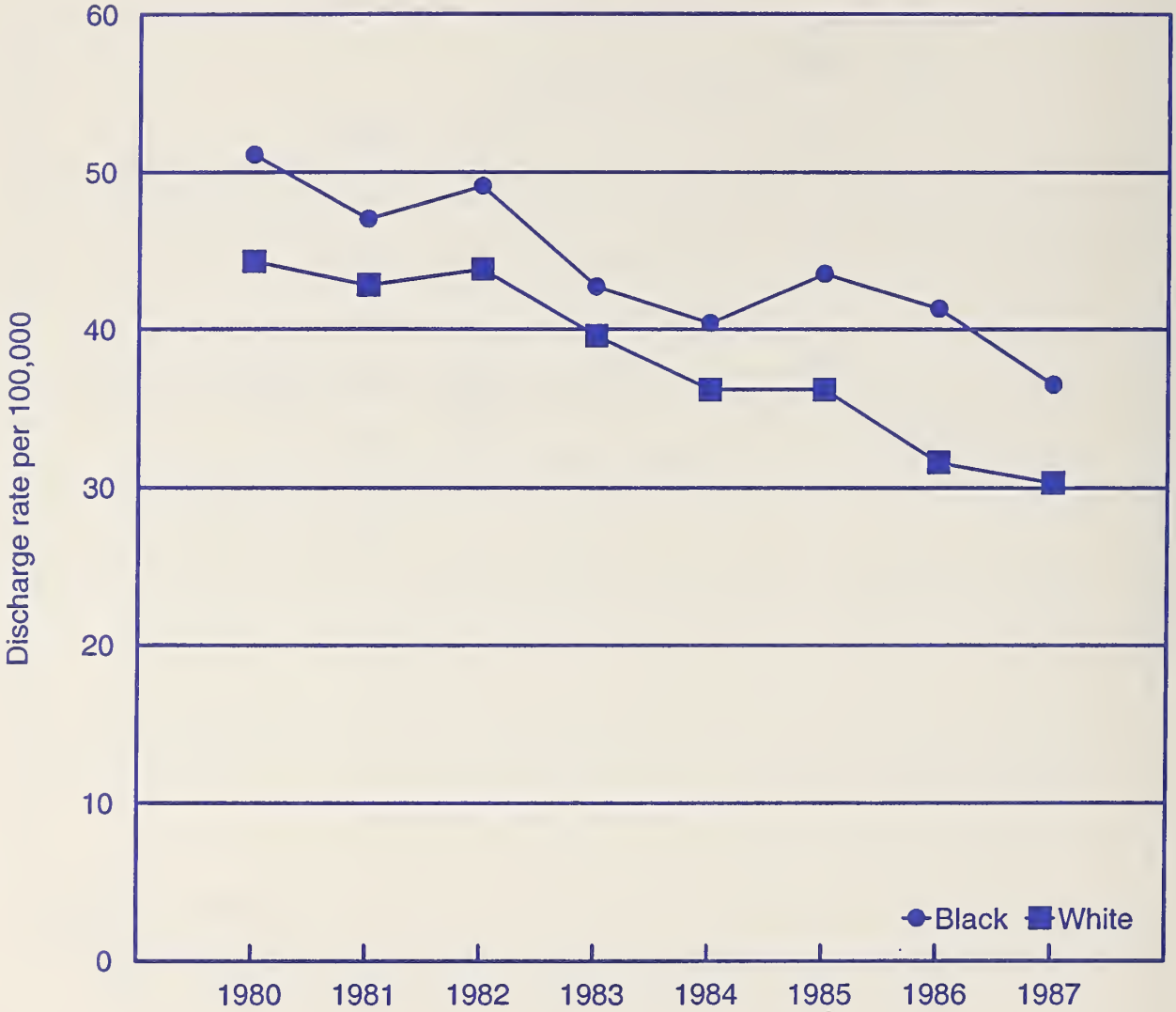
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	136.2 (114.4, 158.1)	150.5 (129.8, 171.2)	131.4 (111.4, 151.5)	131.5 (113.5, 149.5)	135.4 (116.2, 154.6)	114.0 (97.7, 130.2)	119.7 (101.5, 137.8)	115.8 (98.1, 133.5)	-3.1 (-4.8, -1.5)
White	239.3 (226.2, 252.5)	239.6 (227.2, 252.1)	232.2 (218.8, 245.6)	233.6 (221.8, 245.5)	220.7 (209.4, 232.0)	214.6 (202.6, 226.6)	206.8 (194.8, 218.7)	207.7 (195.0, 220.3)	-2.4 (-2.9, -1.9)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

126. Liver disease, not alcohol related



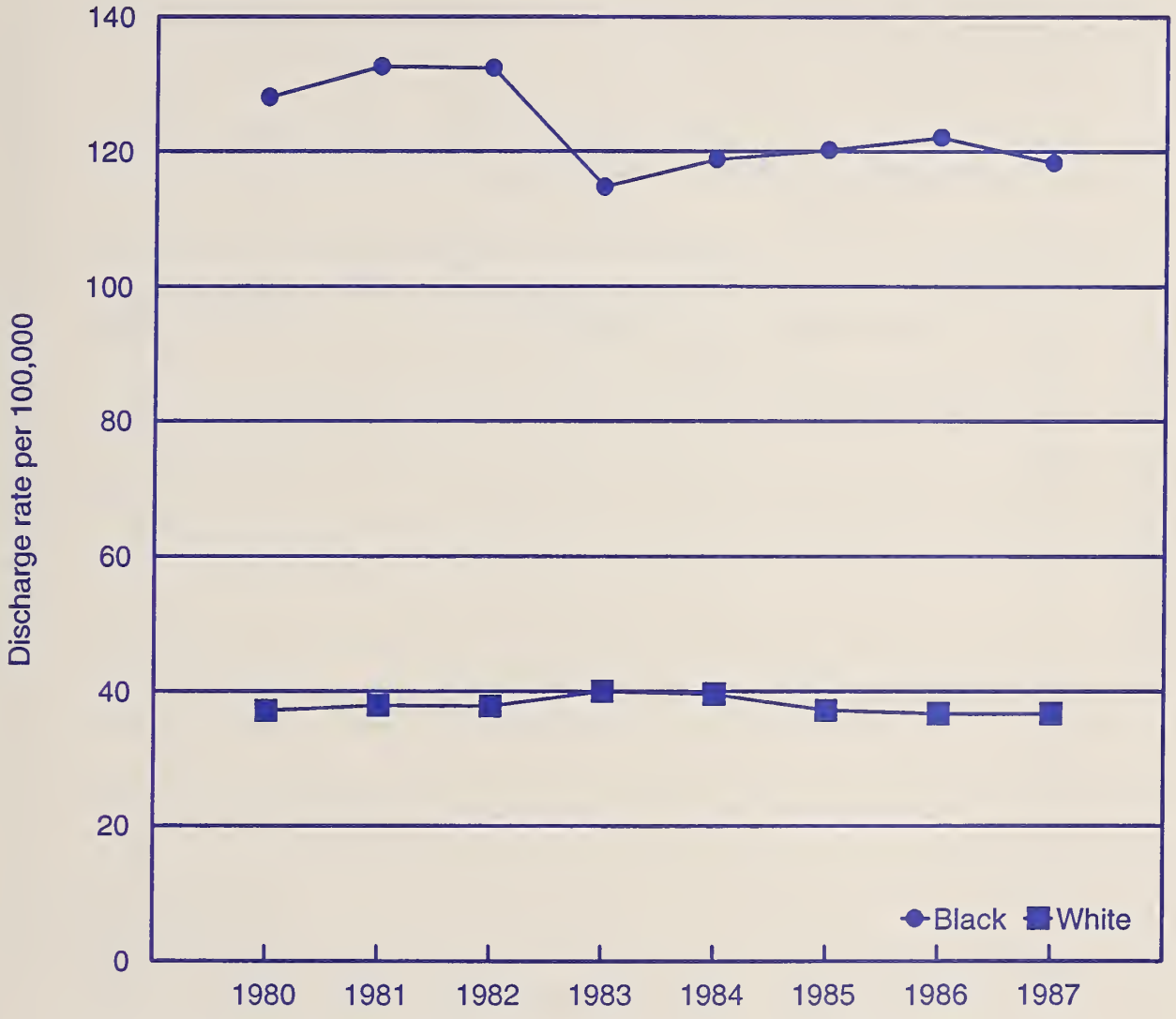
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	51.1 (41.9, 60.3)	47.0 (37.2, 56.8)	49.1 (39.4, 58.9)	42.7 (33.8, 51.7)	40.4 (33.0, 47.8)	43.5 (34.9, 52.2)	41.3 (31.6, 51.0)	36.5 (28.6, 44.3)	–4.0 (–5.5, –2.5)
White	44.3 (40.8, 47.8)	42.8 (39.5, 46.1)	43.8 (40.9, 46.6)	39.6 (36.8, 42.4)	36.2 (33.6, 38.8)	36.2 (33.6, 38.8)	31.6 (29.3, 33.9)	30.3 (27.6, 33.0)	–5.6 (–6.7, –4.4)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

127. Pancreas disorders (not diabetes)



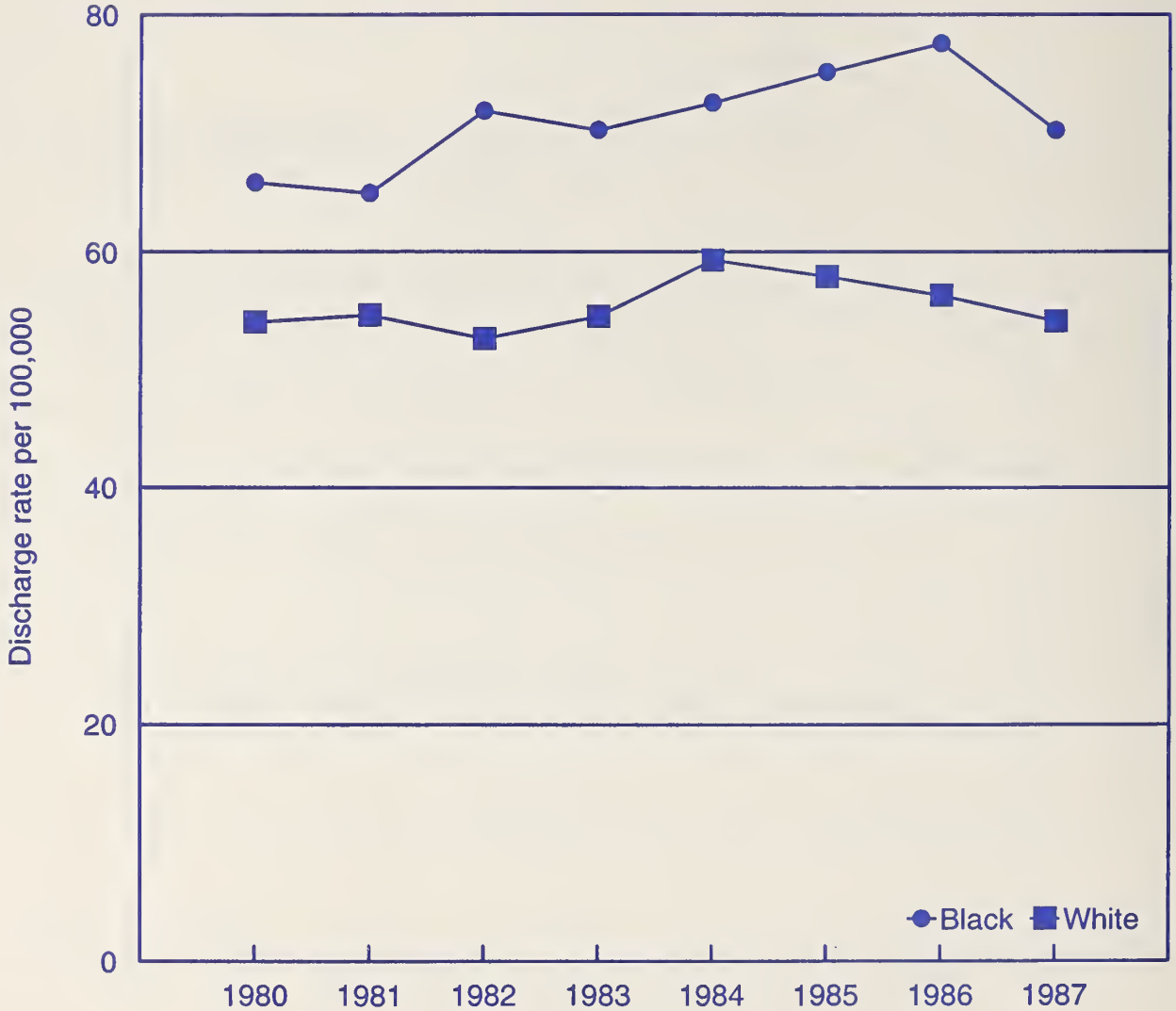
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	128.0 (105.0, 151.0)	132.5 (107.7, 157.2)	132.3 (109.1, 155.5)	114.7 (97.1, 132.3)	118.8 (99.0, 138.7)	120.2 (100.1, 140.3)	122.1 (98.9, 145.2)	118.3 (97.9, 138.7)	-1.4 (-2.8, -0.1)
White	37.1 (34.3, 39.9)	37.9 (35.2, 40.6)	37.8 (35.1, 40.5)	40.0 (36.9, 43.1)	39.6 (36.8, 42.5)	37.2 (34.4, 39.9)	36.7 (34.0, 39.4)	36.7 (33.9, 39.6)	-0.3 (-1.4, 0.7)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

128. Gastrointestinal hemorrhage



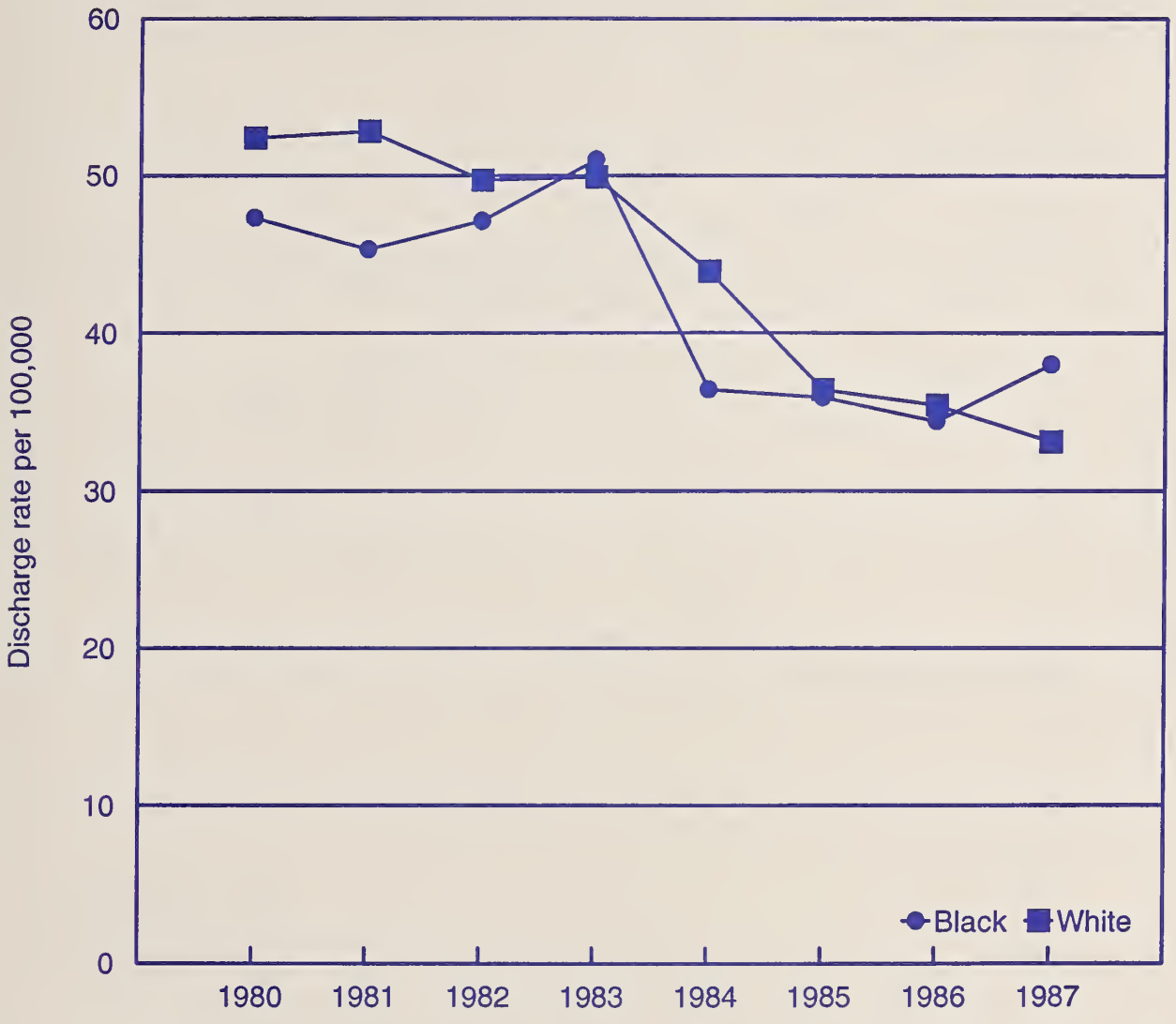
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	65.8 (52.5, 79.1)	64.9 (51.7, 78.2)	71.8 (59.3, 84.3)	70.2 (55.7, 84.7)	72.5 (60.6, 84.4)	75.1 (60.8, 89.3)	77.5 (60.9, 94.1)	70.2 (55.9, 84.5)	1.8 (0.4, 3.2)
White	54.0 (50.5, 57.4)	54.6 (50.9, 58.2)	52.6 (49.1, 56.1)	54.5 (51.0, 57.9)	59.3 (55.4, 63.1)	57.9 (54.0, 61.8)	56.3 (52.4, 60.3)	54.1 (50.0, 58.2)	0.7 (–0.5, 1.9)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

129. Other gastrointestinal disorders



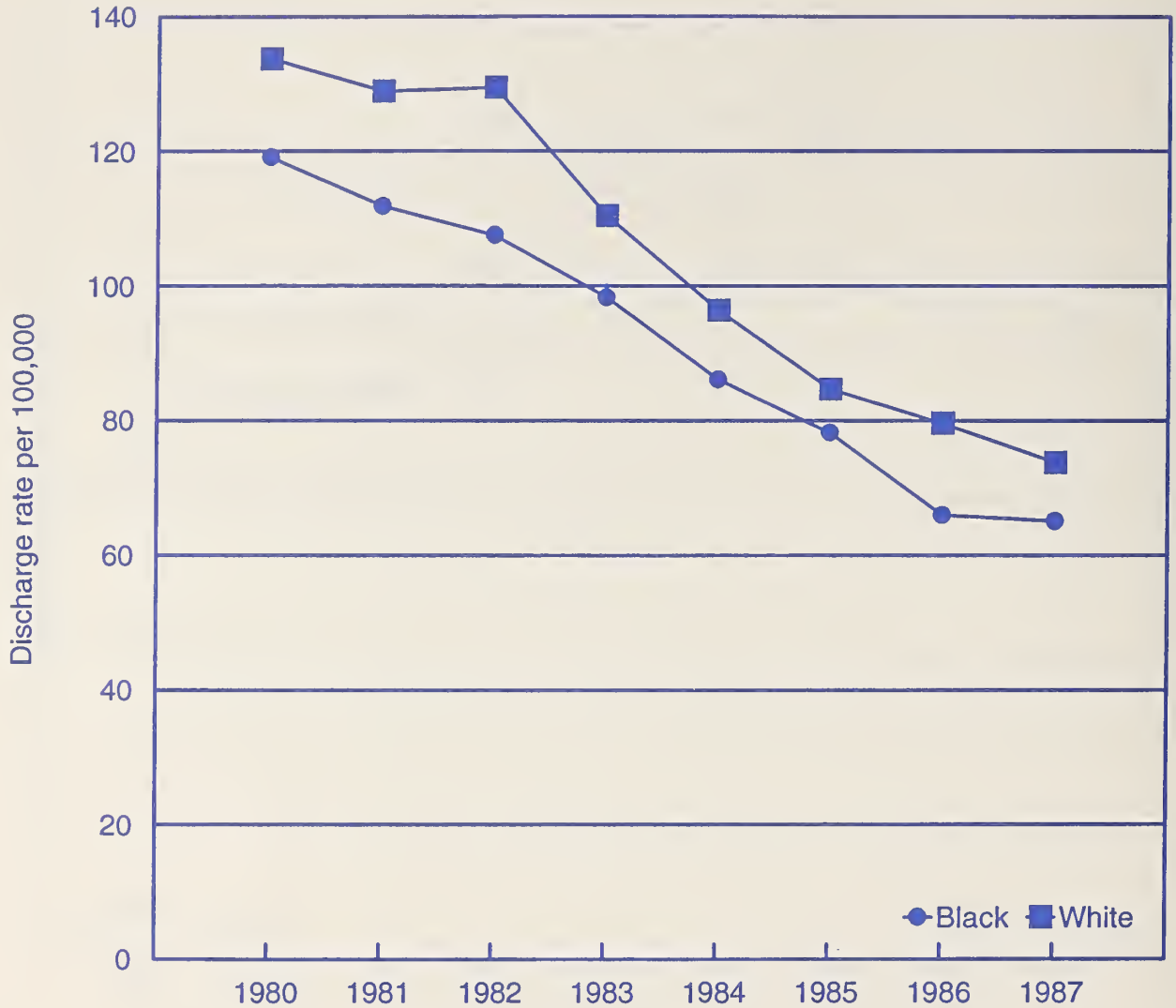
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	47.3 (38.9, 55.7)	45.3 (37.0, 53.7)	47.1 (39.3, 54.9)	51.0 (42.3, 59.7)	36.4 (28.8, 43.9)	35.9 (29.4, 42.5)	34.4 (26.0, 42.8)	38.0 (25.5, 50.5)	-4.7 (-7.7, -1.6)
White	52.4 (48.6, 56.3)	52.8 (49.3, 56.3)	49.7 (46.1, 53.4)	49.9 (46.2, 53.5)	43.9 (40.3, 47.4)	36.4 (33.7, 39.1)	35.4 (32.3, 38.5)	33.1 (30.4, 35.8)	-7.2 (-8.9, -5.5)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

130. Abdominal pain



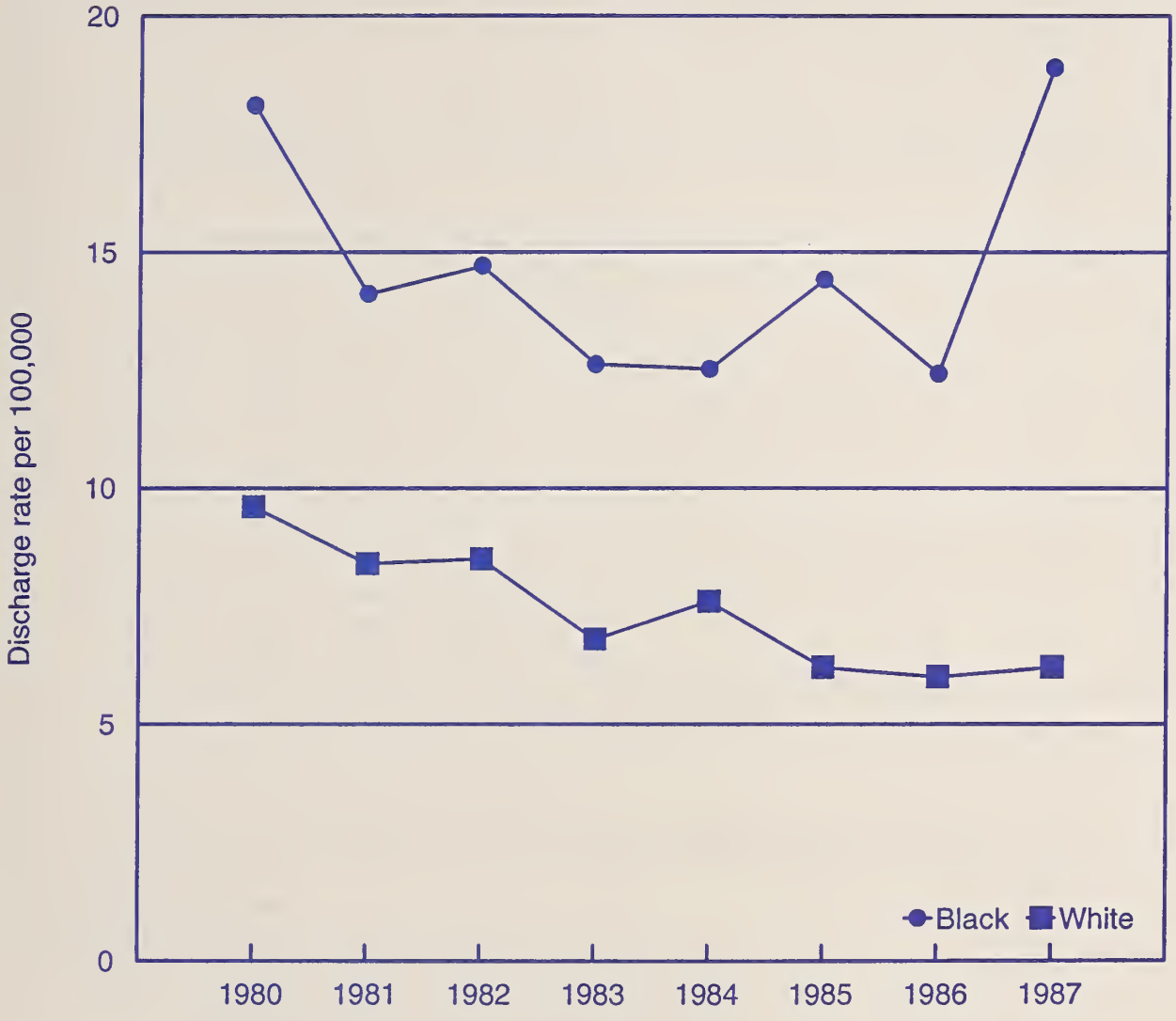
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	119.1 (99.7, 138.5)	111.8 (94.9, 128.7)	107.5 (90.5, 124.6)	98.3 (82.4, 114.2)	86.1 (71.9, 100.3)	78.2 (65.6, 90.9)	65.9 (54.2, 77.6)	65.0 (49.6, 80.4)	-9.1 (-10.2, -7.9)
White	133.7 (122.7, 144.7)	128.9 (119.1, 138.7)	129.4 (119.7, 139.1)	110.4 (101.5, 119.3)	96.4 (88.1, 104.8)	84.7 (78.4, 91.0)	79.6 (73.0, 86.2)	73.7 (67.3, 80.2)	-9.1 (-10.5, -7.6)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

131. Nephritis, nephrosis



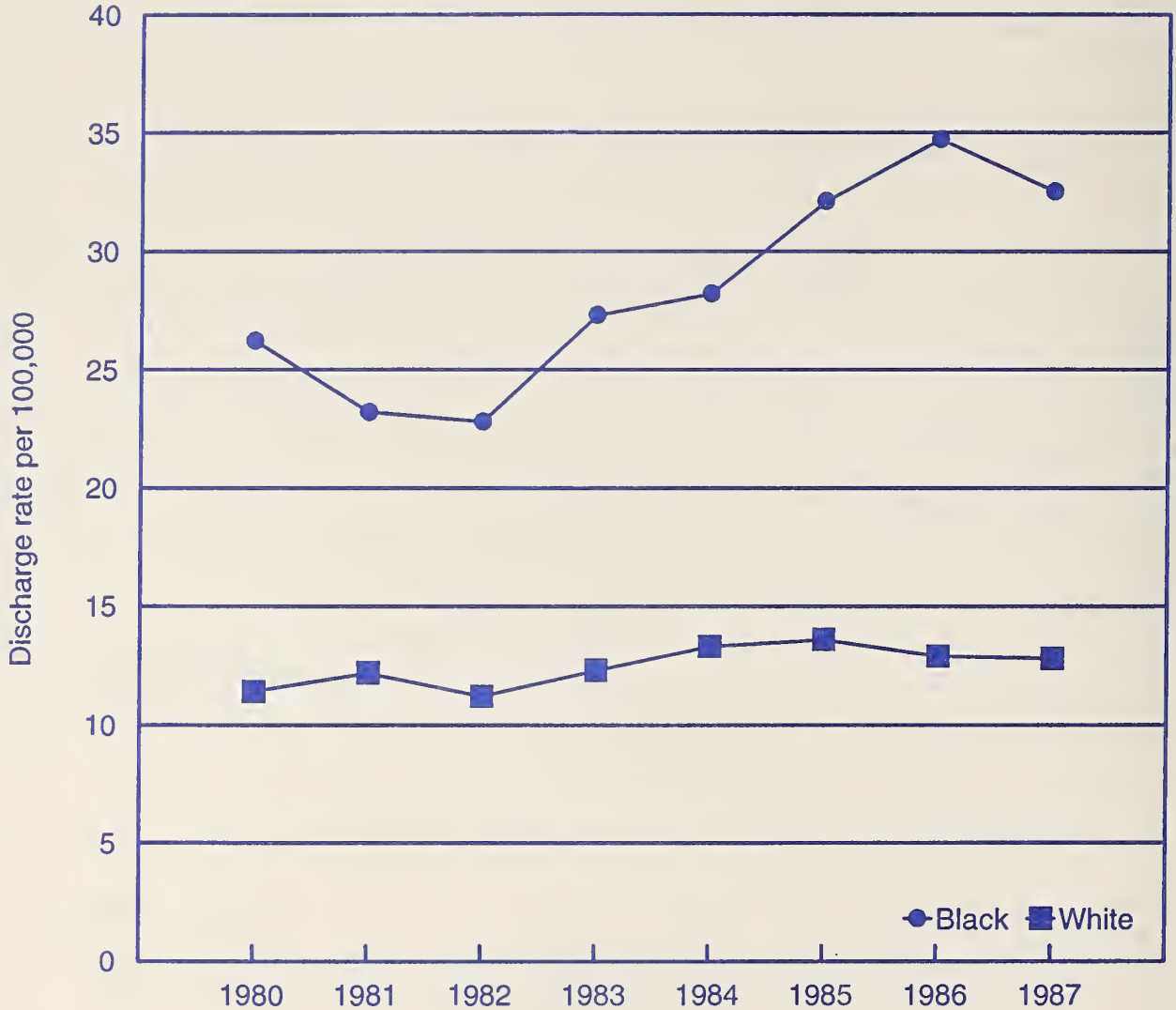
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	18.1 (12.4, 23.7)	14.1 (10.0, 18.2)	14.7 (10.6, 18.9)	12.6 (8.8, 16.3)	12.5 (8.4, 16.5)	14.4 (10.5, 18.3)	12.4 (7.2, 17.5)	18.9 (13.2, 24.5)	-0.5 (-5.7, 5.0)
White	9.6 (8.1, 11.0)	8.4 (7.3, 9.4)	8.5 (7.2, 9.8)	6.8 (5.9, 7.7)	7.6 (6.5, 8.7)	6.2 (5.1, 7.2)	6.0 (5.1, 6.9)	6.2 (5.1, 7.4)	-6.4 (-8.4, -4.3)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

132. Acute and unspecified renal failure



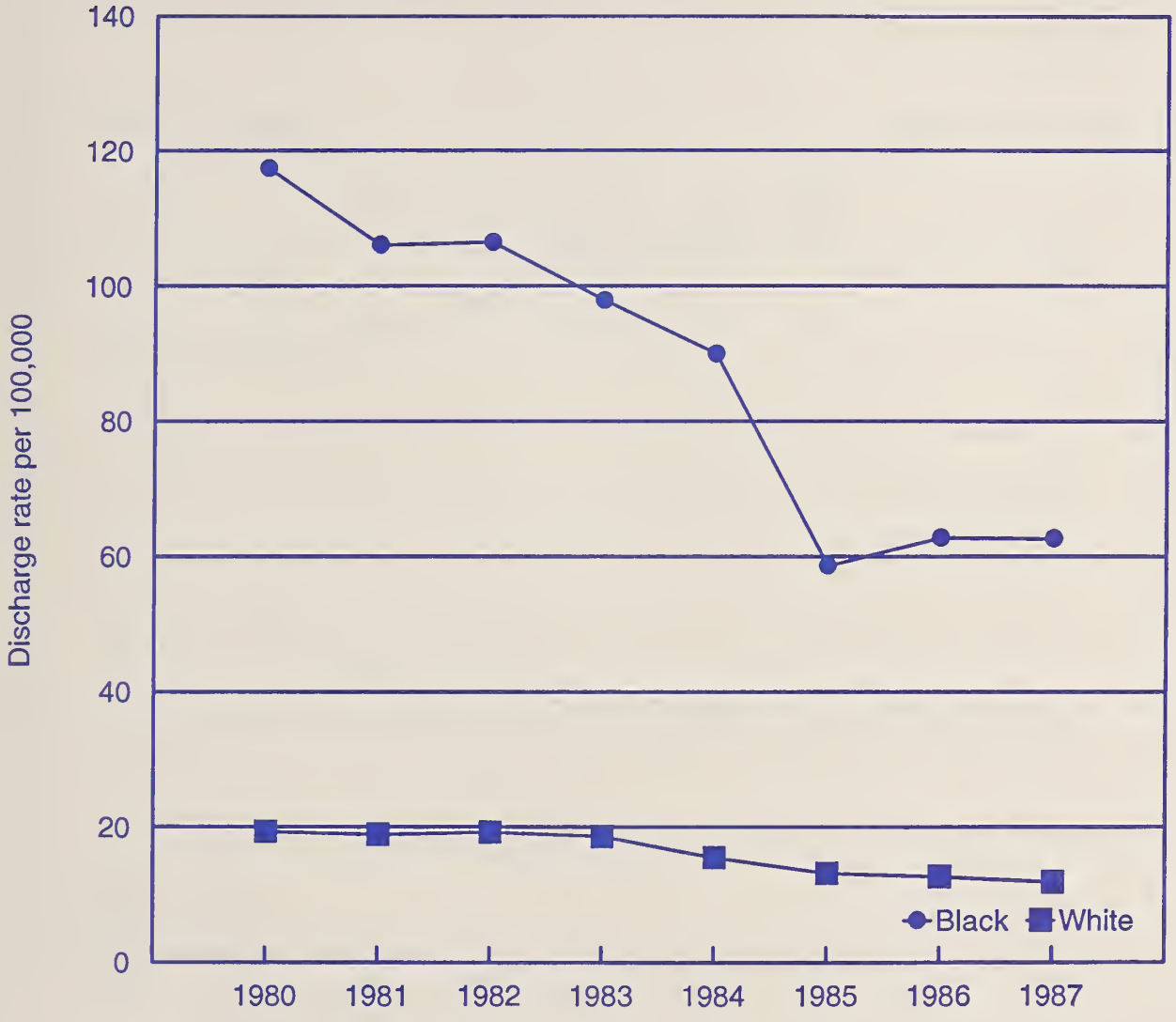
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	26.2 (20.4, 32.0)	23.2 (17.1, 29.4)	22.8 (16.7, 29.0)	27.3 (20.4, 34.1)	28.2 (21.8, 34.6)	32.1 (25.3, 39.0)	34.7 (27.0, 42.3)	32.5 (25.7, 39.3)	5.6 (2.9, 8.4)
White	11.4 (10.1, 12.6)	12.2 (11.0, 13.5)	11.2 (10.1, 12.3)	12.3 (11.0, 13.5)	13.3 (11.8, 14.8)	13.6 (12.3, 15.0)	12.9 (11.5, 14.3)	12.8 (11.4, 14.1)	2.1 (0.5, 3.7)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

133. Chronic renal failure



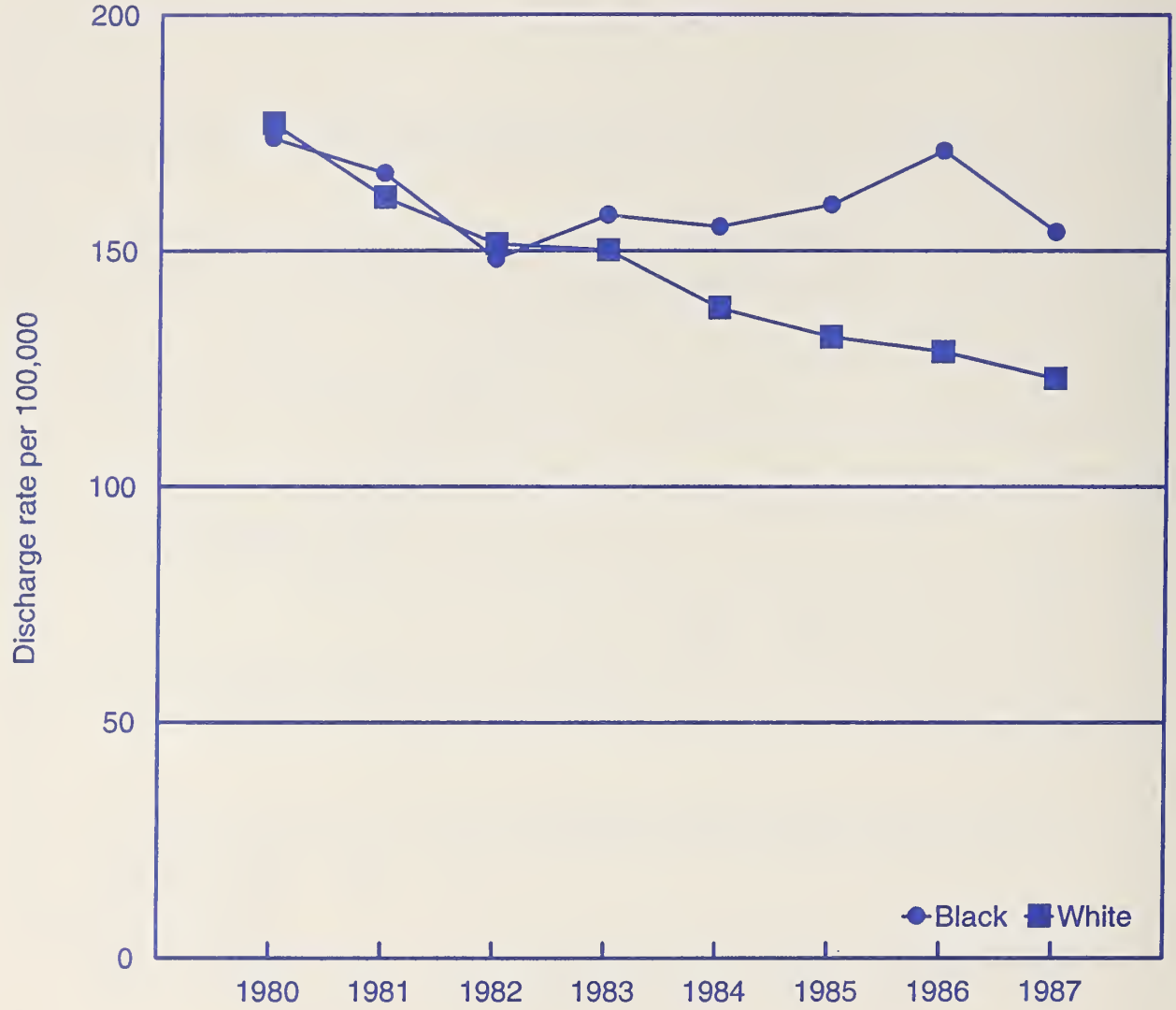
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	117.4 (53.1, 181.7)	106.1 (55.4, 156.8)	106.5 (50.2, 162.8)	97.9 (52.0, 143.9)	90.0 (44.7, 135.4)	58.6 (35.7, 81.4)	62.7 (39.6, 85.8)	62.6 (36.1, 89.1)	-10.1 (-13.1, -6.9)
White	19.3 (14.6, 24.1)	18.9 (14.2, 23.6)	19.2 (14.7, 23.7)	18.6 (13.8, 23.5)	15.5 (11.8, 19.2)	13.2 (10.0, 16.5)	12.7 (9.7, 15.7)	11.9 (9.4, 14.4)	-7.7 (-9.7, -5.6)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

134. Urinary tract infection



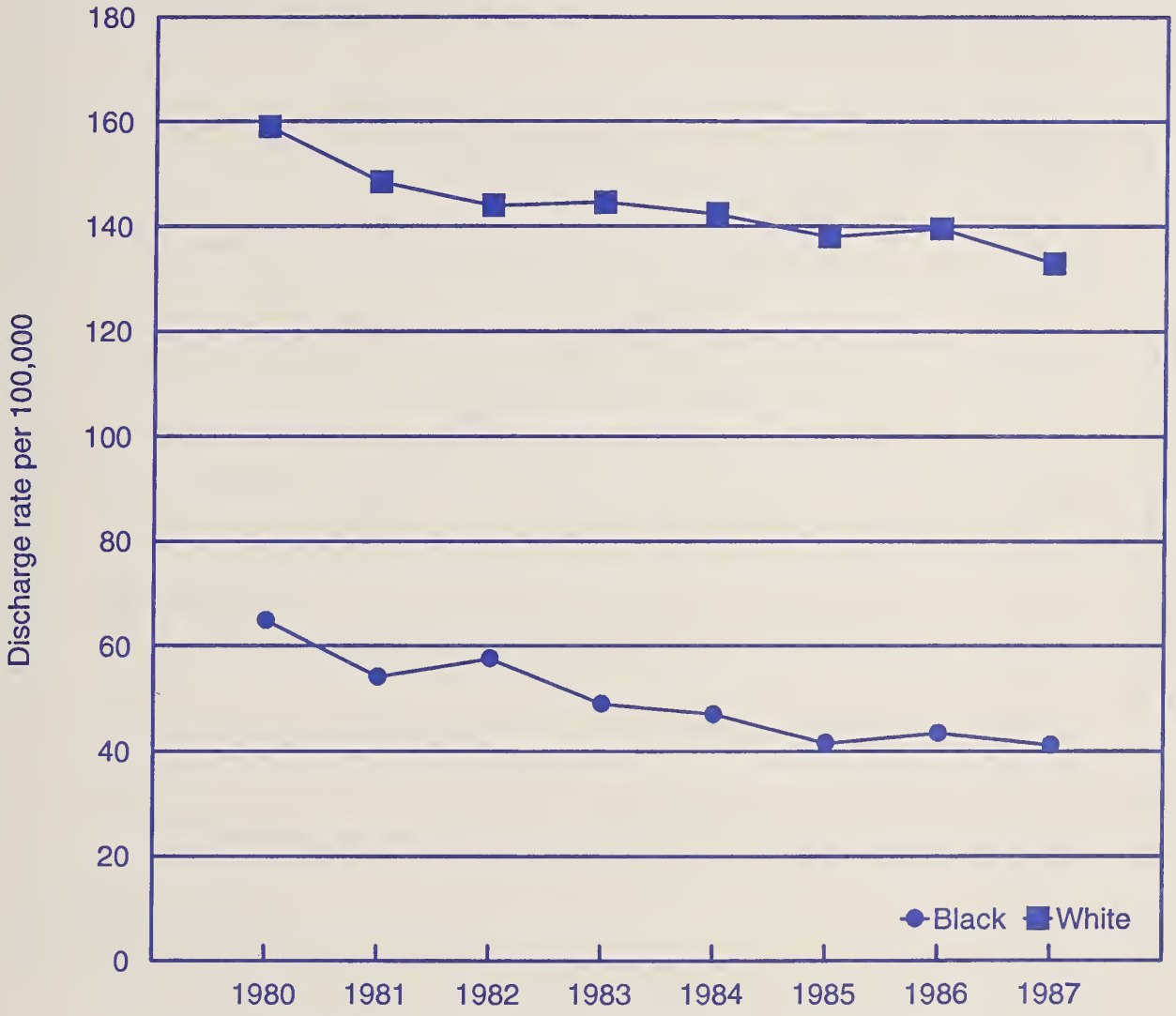
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	173.8 (147.0, 200.7)	166.3 (141.6, 191.1)	148.2 (125.7, 170.7)	157.5 (135.6, 179.4)	155.0 (131.5, 178.6)	159.7 (134.9, 184.4)	171.1 (142.2, 200.1)	153.9 (127.8, 180.0)	-0.6 (-2.3, 1.2)
White	177.0 (163.7, 190.2)	161.3 (149.8, 172.7)	151.4 (142.1, 160.7)	150.1 (142.1, 158.2)	137.9 (129.5, 146.2)	131.7 (123.4, 140.0)	128.6 (120.8, 136.3)	122.9 (115.2, 130.6)	-4.9 (-5.5, -4.2)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

135. Calculus of urinary tract



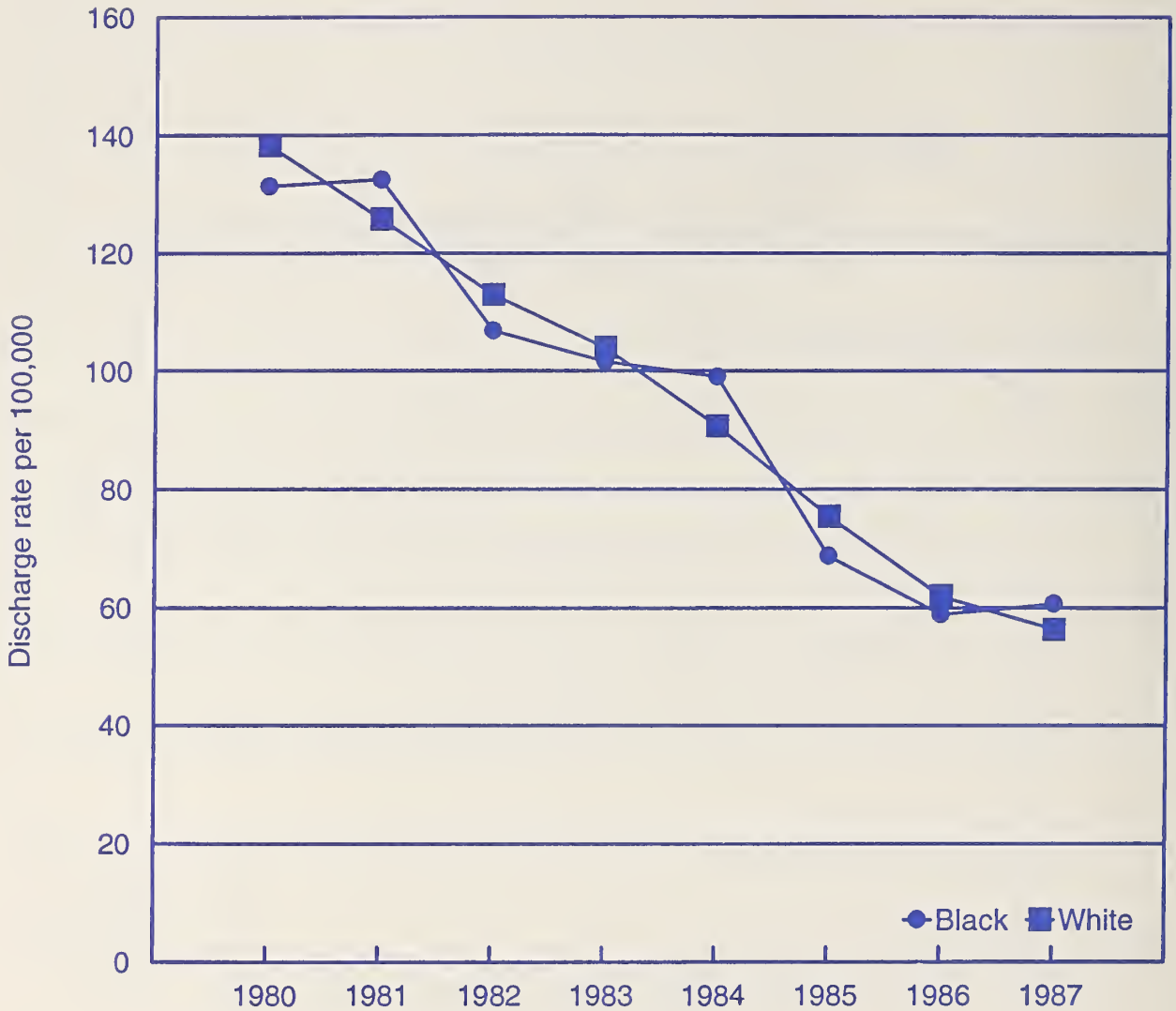
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	64.8 (52.4, 77.1)	54.1 (44.8, 63.4)	57.6 (47.1, 68.2)	49.0 (39.5, 58.4)	47.0 (38.8, 55.3)	41.5 (34.2, 48.7)	43.4 (34.9, 51.9)	41.1 (30.5, 51.8)	-6.1 (-7.8, -4.4)
White	159.0 (148.5, 169.5)	148.4 (137.9, 159.0)	143.9 (134.1, 153.6)	144.5 (136.2, 152.9)	142.3 (133.8, 150.8)	137.9 (127.8, 147.9)	139.5 (127.1, 152.0)	132.8 (122.5, 143.1)	-2.0 (-2.6, -1.4)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

136. Other genitourinary disorders



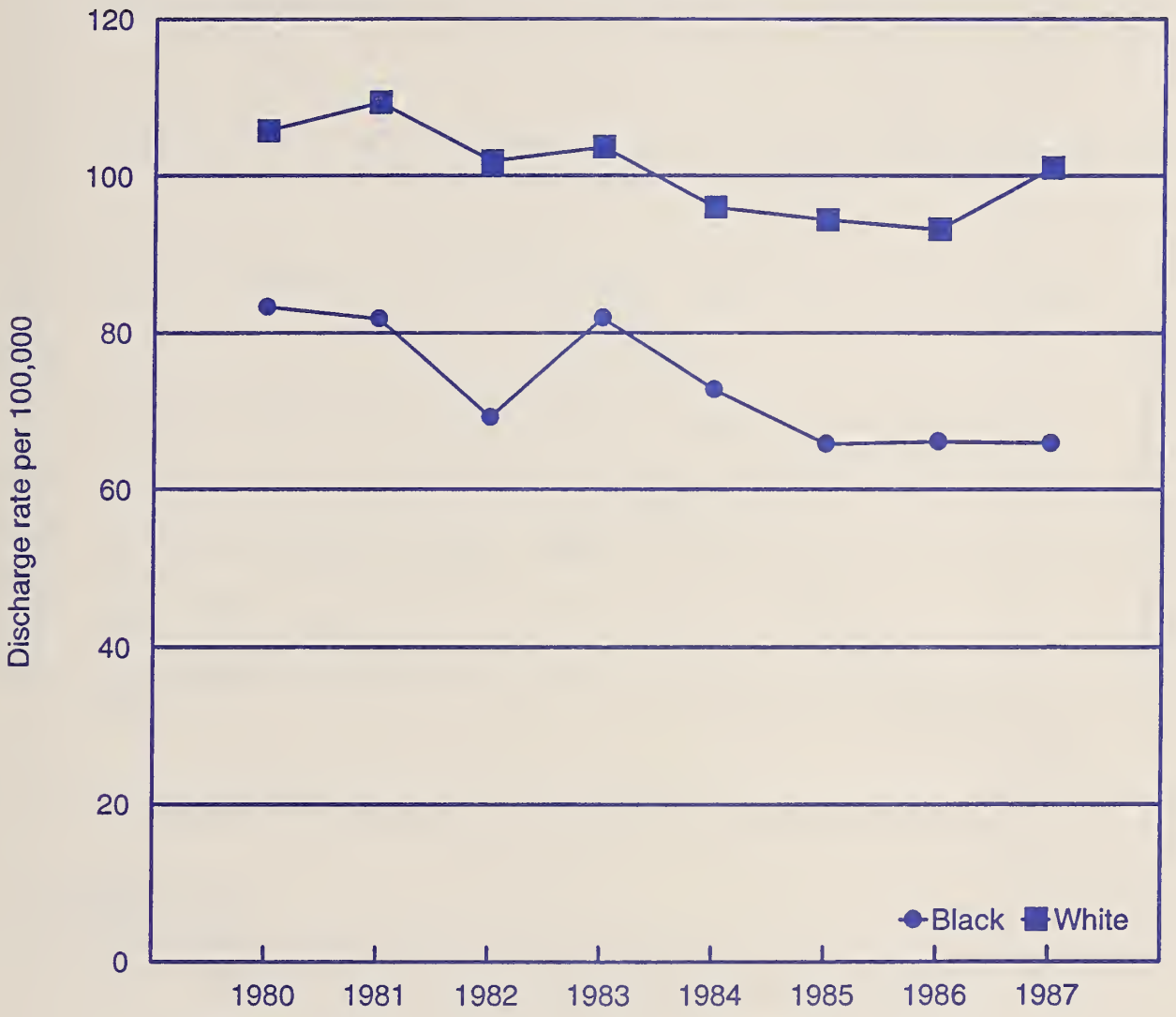
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	131.3 (105.1, 157.4)	132.4 (109.2, 155.7)	106.8 (89.2, 124.5)	101.6 (84.7, 118.5)	99.0 (83.7, 114.2)	68.7 (57.3, 80.0)	58.8 (46.8, 70.9)	60.6 (48.3, 72.9)	-12.1 (-14.7, -9.4)
White	138.2 (127.7, 148.7)	125.8 (115.4, 136.2)	112.9 (104.7, 121.1)	103.9 (96.0, 111.9)	90.7 (83.7, 97.7)	75.4 (68.3, 82.6)	61.9 (56.5, 67.4)	56.3 (50.8, 61.7)	-12.5 (-13.7, -11.2)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

137. Hyperplasia of prostate



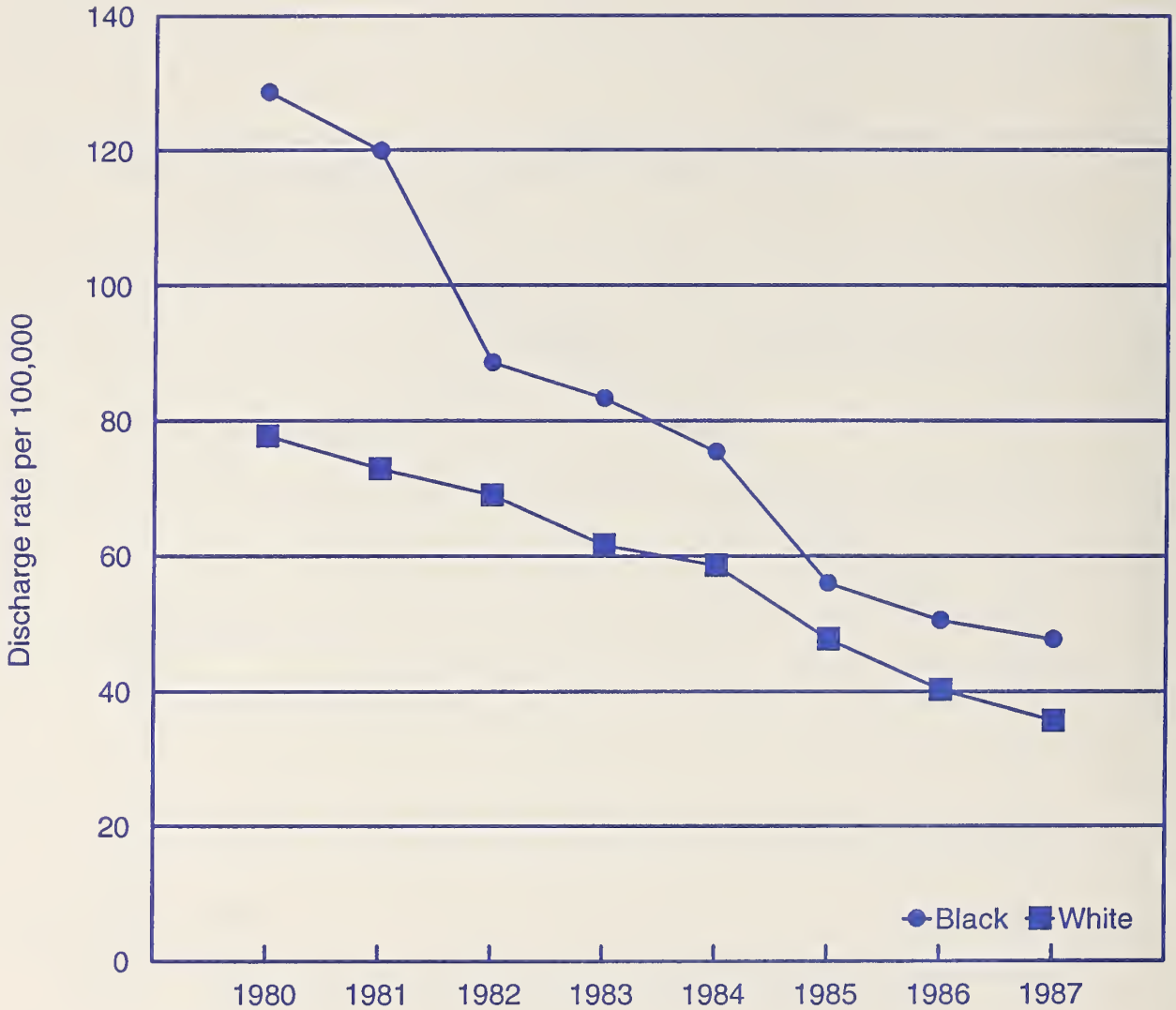
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	83.3 (65.7, 100.9)	81.8 (63.7, 99.9)	69.2 (54.1, 84.3)	81.9 (68.1, 95.8)	72.7 (55.2, 90.2)	65.8 (52.0, 79.5)	66.1 (51.6, 80.7)	65.9 (51.5, 80.4)	-3.5 (-5.3, -1.6)
White	105.7 (96.4, 114.9)	109.3 (99.4, 119.2)	101.8 (94.3, 109.2)	103.6 (96.5, 110.6)	96.0 (89.4, 102.6)	94.4 (87.3, 101.5)	93.2 (85.1, 101.3)	101.0 (92.3, 109.6)	-1.7 (-2.9, -0.4)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

138. Other male genital disorders



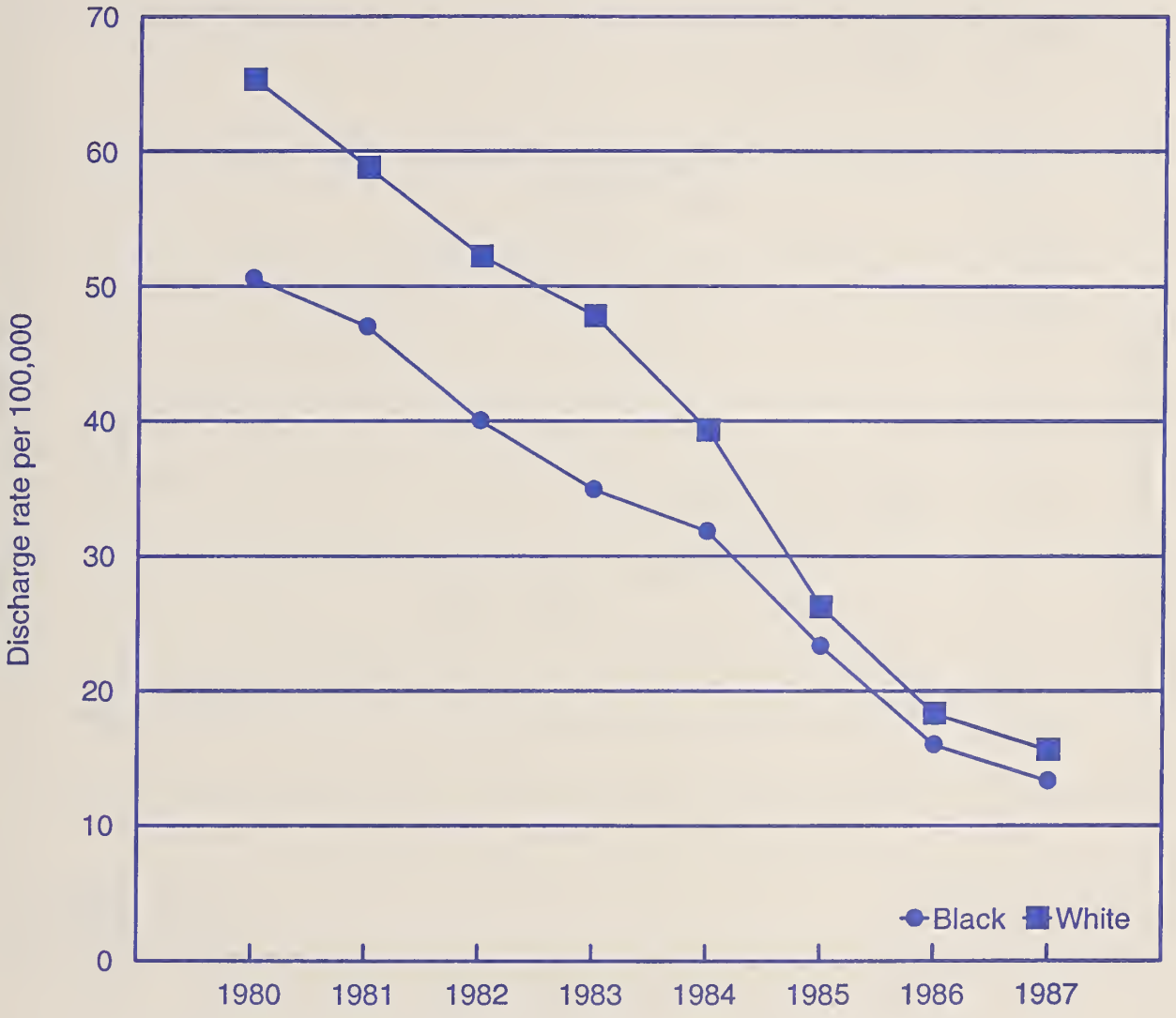
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	128.6 (99.7, 157.4)	119.9 (98.7, 141.1)	88.6 (72.6, 104.6)	83.3 (69.2, 97.5)	75.4 (62.1, 88.7)	55.9 (42.9, 68.9)	50.4 (39.0, 61.9)	47.6 (37.7, 57.6)	-14.1 (-15.8, -12.3)
White	77.8 (72.0, 83.7)	72.9 (67.4, 78.4)	69.0 (63.7, 74.2)	61.6 (57.3, 65.9)	58.6 (54.8, 62.4)	47.7 (43.8, 51.7)	40.2 (36.1, 44.3)	35.6 (31.9, 39.4)	-10.8 (-12.5, -9.1)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

139. Nonmalignant breast conditions



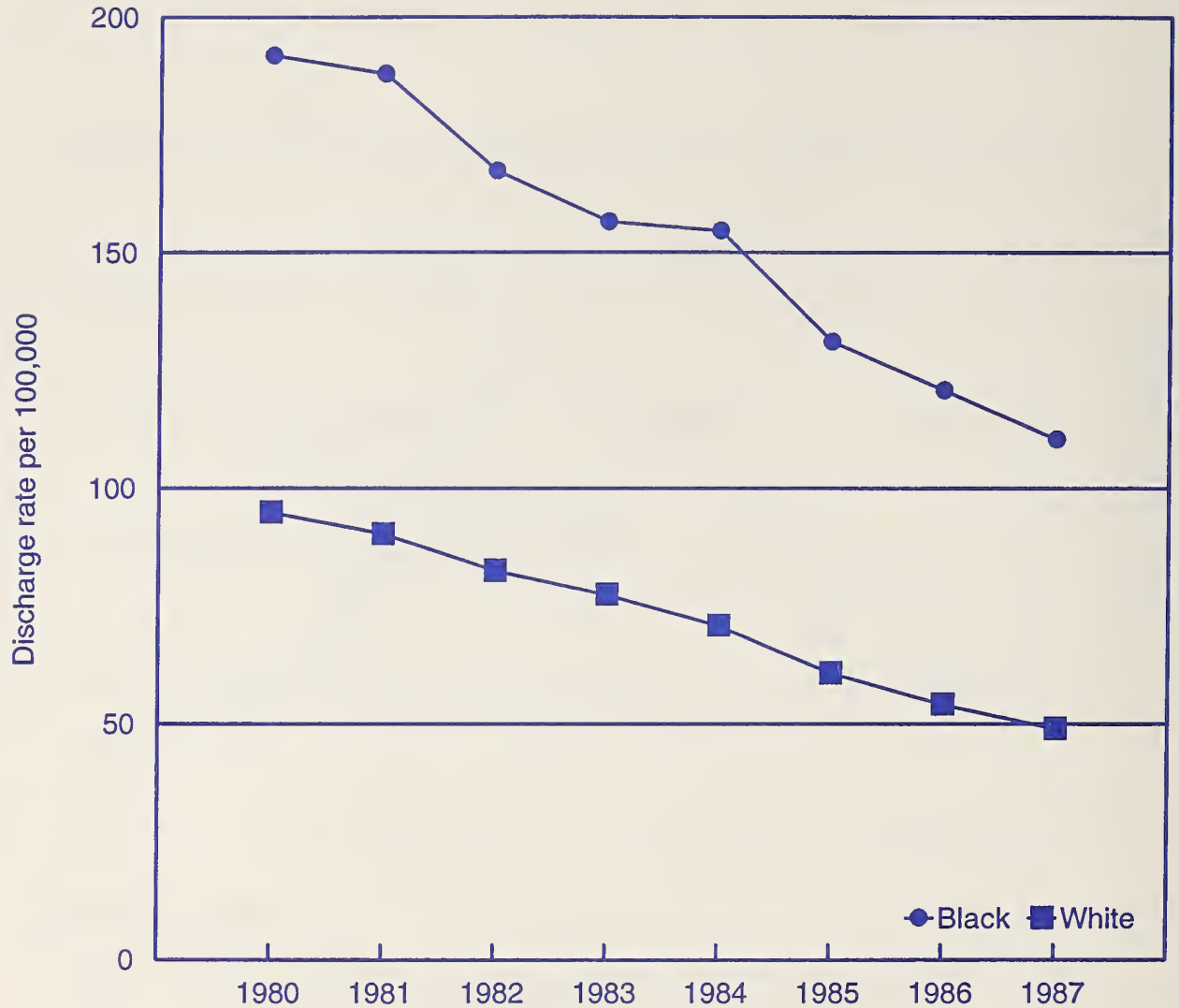
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	50.6 (40.0, 61.2)	47.0 (37.8, 56.3)	40.0 (33.1, 46.9)	34.9 (27.1, 42.8)	31.8 (24.2, 39.4)	23.3 (17.2, 29.4)	16.0 (10.7, 21.2)	13.3 (9.6, 16.9)	-17.8 (-20.8, -14.8)
White	65.3 (59.3, 71.2)	58.8 (53.9, 63.7)	52.2 (47.3, 57.0)	47.8 (43.5, 52.2)	39.3 (35.1, 43.5)	26.2 (23.0, 29.4)	18.3 (14.7, 21.8)	15.6 (12.2, 19.0)	-19.4 (-22.9, -15.8)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

140. Inflammation of female pelvic organs



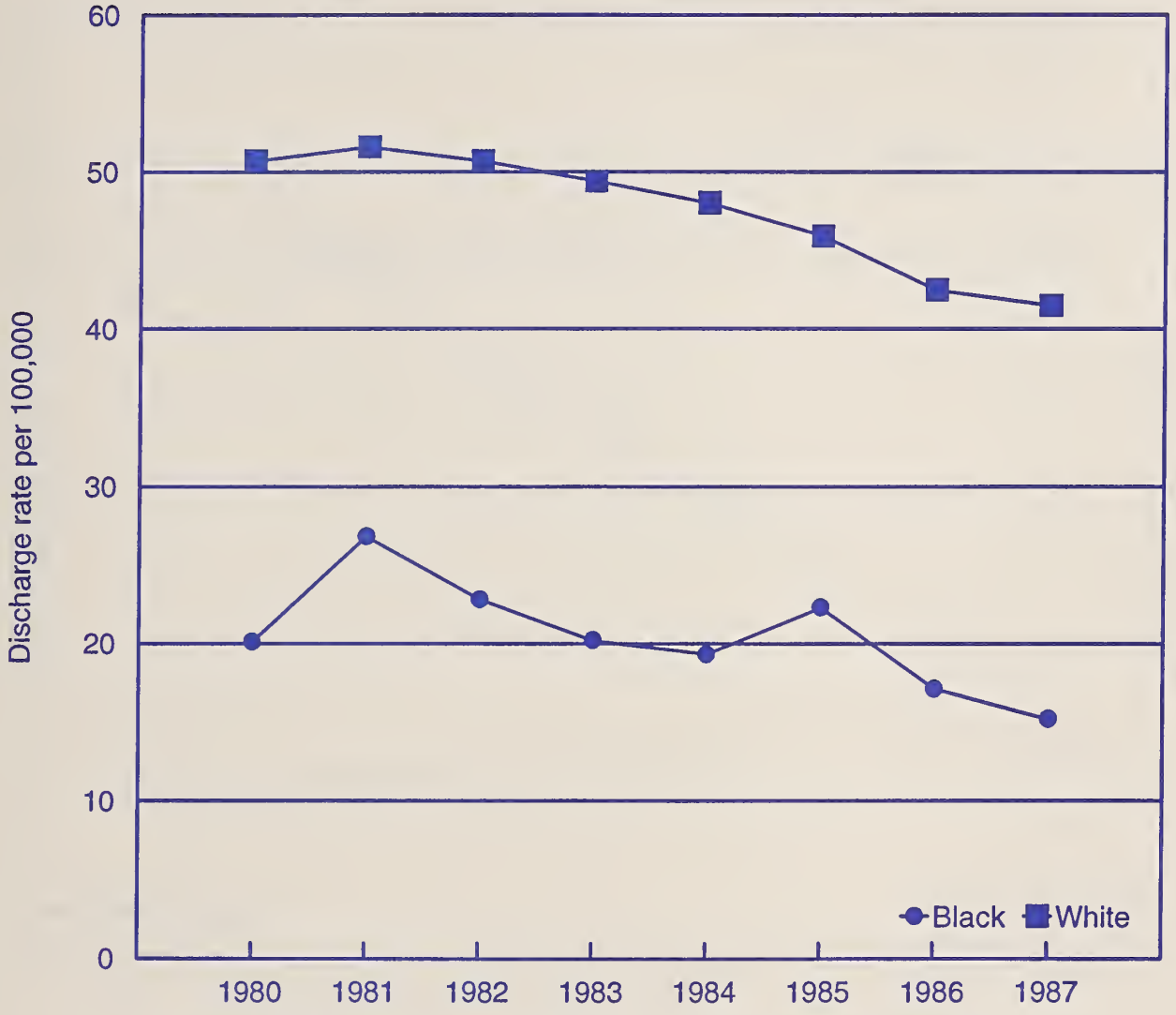
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	191.8 (149.3, 234.3)	187.9 (152.5, 223.3)	167.2 (136.3, 198.1)	156.4 (127.9, 184.9)	154.5 (125.0, 184.0)	131.0 (99.7, 162.2)	120.8 (93.8, 147.7)	110.4 (87.6, 133.1)	-7.8 (-8.8, -6.8)
White	94.8 (86.9, 102.7)	90.2 (82.7, 97.7)	82.4 (76.0, 88.9)	77.4 (71.1, 83.6)	70.8 (65.5, 76.1)	60.8 (55.8, 65.7)	54.1 (49.4, 58.7)	49.0 (44.5, 53.5)	-9.3 (-10.3, -8.3)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

141. Endometriosis



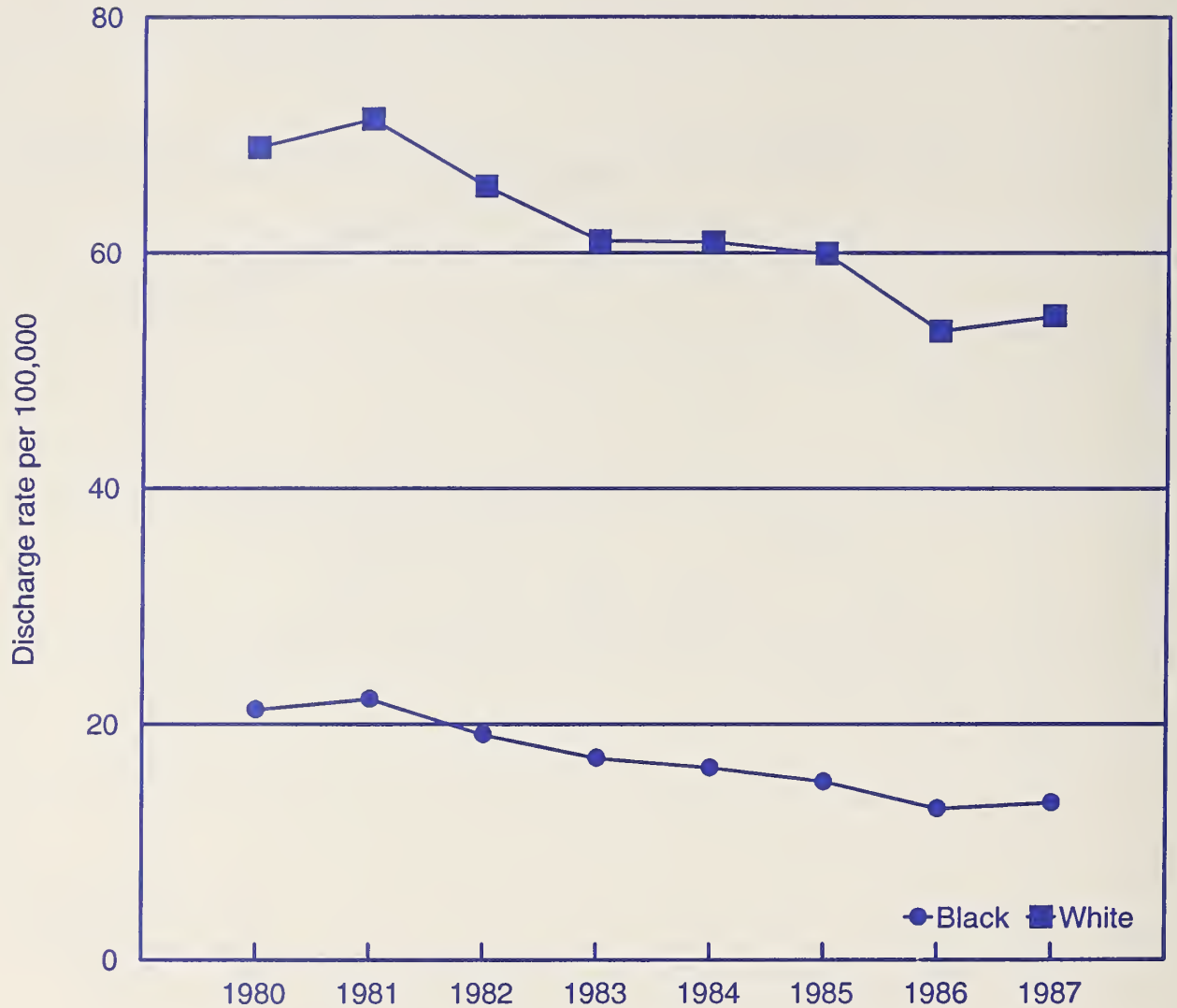
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	20.1 (15.5, 24.7)	26.8 (20.1, 33.5)	22.8 (17.2, 28.4)	20.2 (15.8, 24.7)	19.3 (14.8, 23.8)	22.3 (16.7, 27.9)	17.1 (12.3, 22.0)	15.2 (11.5, 19.0)	-5.0 (-8.7, -1.1)
White	50.7 (45.7, 55.7)	51.6 (46.4, 56.8)	50.7 (45.2, 56.1)	49.4 (44.6, 54.2)	48.0 (43.5, 52.6)	45.9 (41.0, 50.7)	42.5 (38.0, 47.0)	41.5 (36.8, 46.3)	-3.1 (-4.0, -2.3)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

142. Prolapse of female genital organs



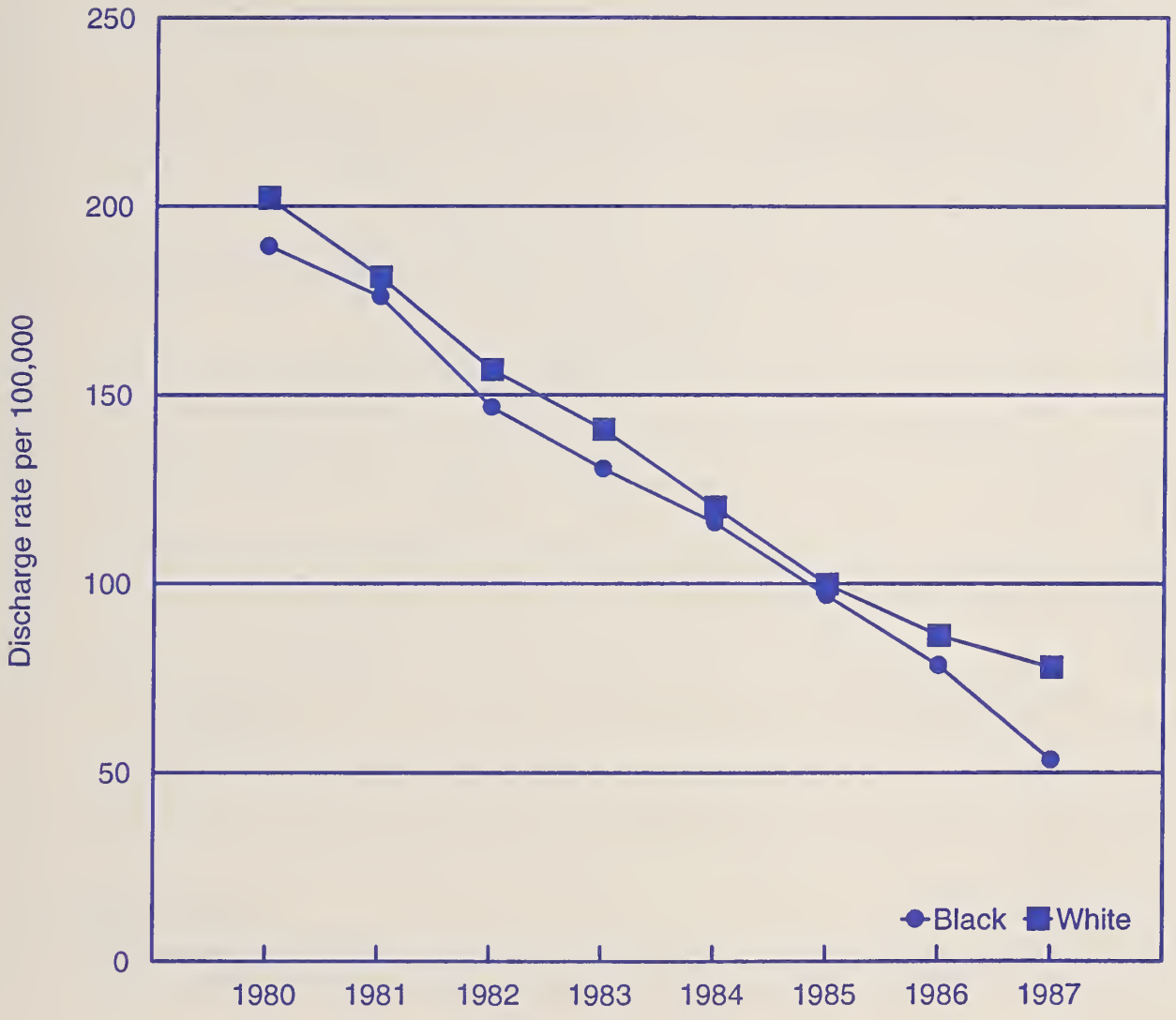
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	21.2 (15.6, 26.9)	22.1 (16.2, 28.0)	19.1 (13.9, 24.3)	17.1 (13.0, 21.2)	16.3 (12.3, 20.2)	15.1 (11.0, 19.1)	12.8 (8.9, 16.6)	13.3 (9.0, 17.6)	-7.7 (-9.2, -6.3)
White	68.9 (62.9, 74.9)	71.3 (65.3, 77.3)	65.6 (59.8, 71.3)	61.0 (56.4, 65.6)	60.9 (56.3, 65.4)	59.9 (55.1, 64.8)	53.3 (48.8, 57.8)	54.6 (49.4, 59.9)	-3.9 (-4.9, -2.9)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

143. Menstrual disorders and ovarian cyst



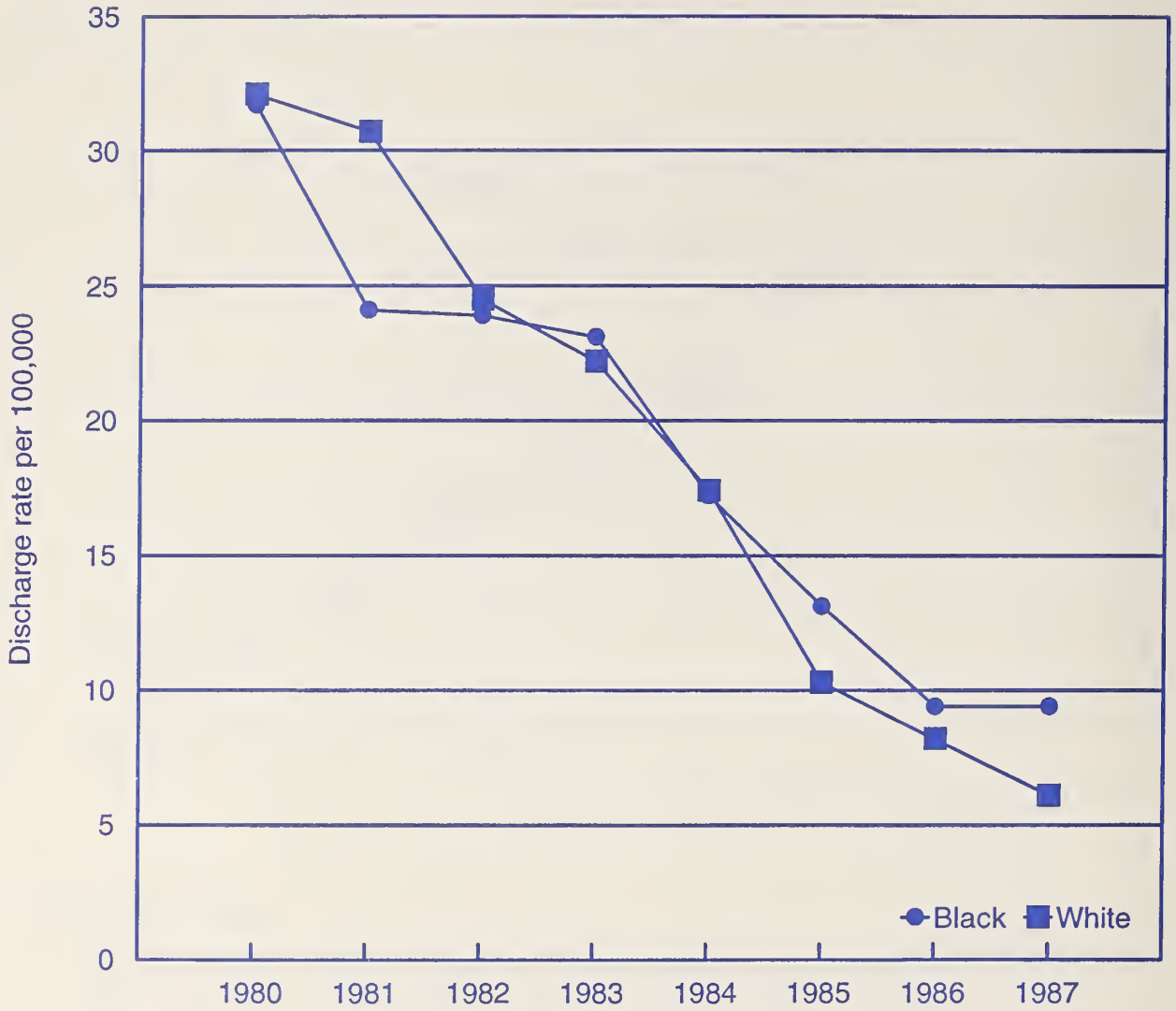
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	189.3 (149.1, 229.5)	176.0 (137.8, 214.2)	146.7 (116.3, 177.1)	130.4 (108.0, 152.8)	116.1 (91.9, 140.3)	96.8 (72.0, 121.6)	78.4 (59.9, 96.9)	53.3 (42.8, 63.9)	-15.6 (-18.1, -13.1)
White	202.1 (186.6, 217.6)	181.1 (167.7, 194.4)	156.6 (144.7, 168.4)	140.8 (130.8, 150.8)	120.2 (110.7, 129.7)	99.8 (91.1, 108.4)	86.2 (78.6, 93.8)	77.8 (69.9, 85.8)	-13.2 (-13.9, -12.5)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

144. Menopausal disorders



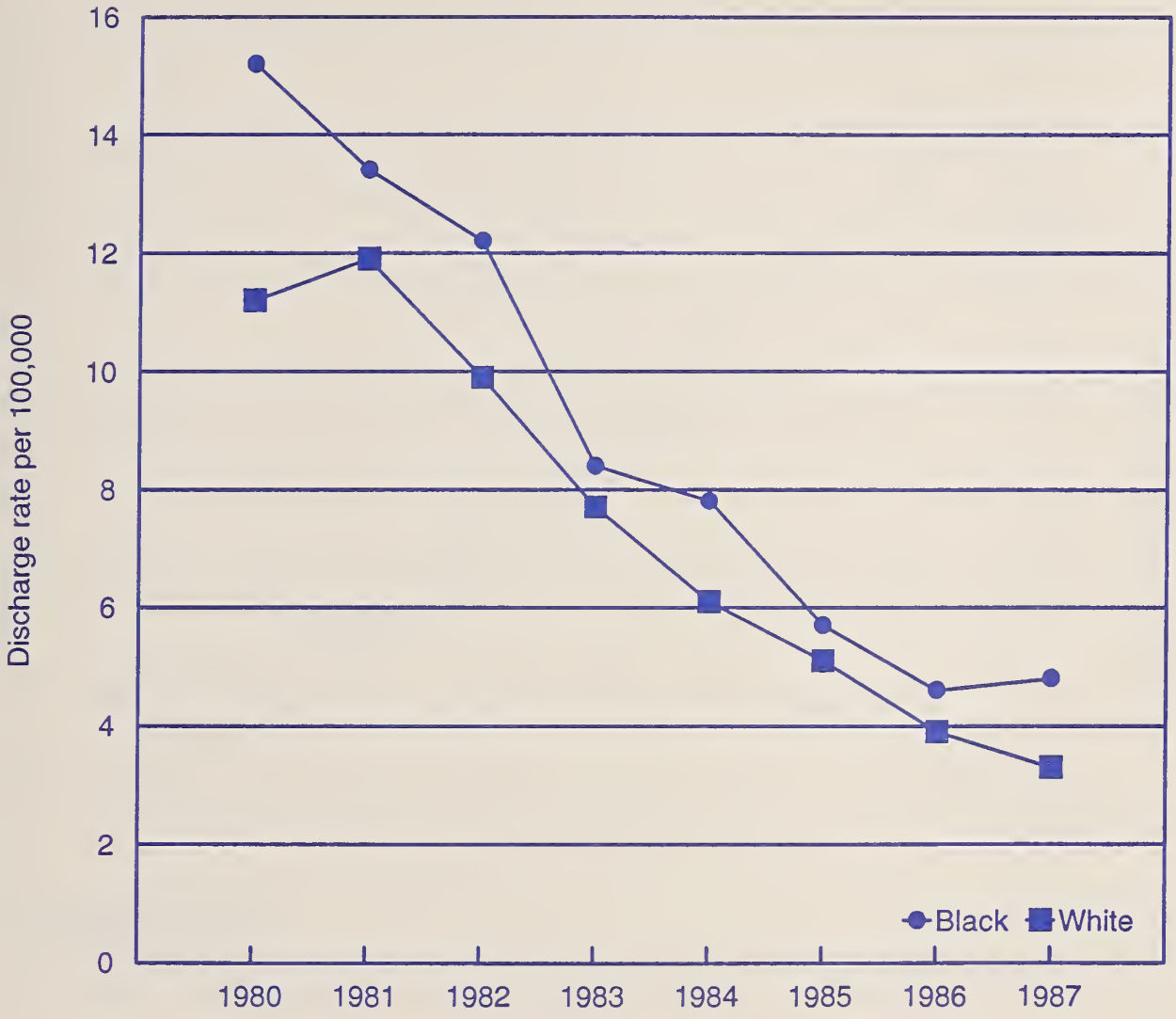
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	31.7 (23.7, 39.6)	24.1 (19.2, 29.1)	23.9 (18.6, 29.3)	23.1 (17.2, 28.9)	17.2 (12.8, 21.6)	13.1 (8.1, 18.0)	9.4 (6.0, 12.7)	9.4 (3.4, 15.4)	-16.7 (-19.7, -13.5)
White	32.1 (29.1, 35.2)	30.7 (27.9, 33.6)	24.5 (22.0, 27.0)	22.2 (19.7, 24.7)	17.4 (15.4, 19.4)	10.3 (8.6, 11.9)	8.2 (6.6, 9.8)	6.1 (4.1, 8.0)	-22.2 (-25.7, -18.7)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

145. Infertility



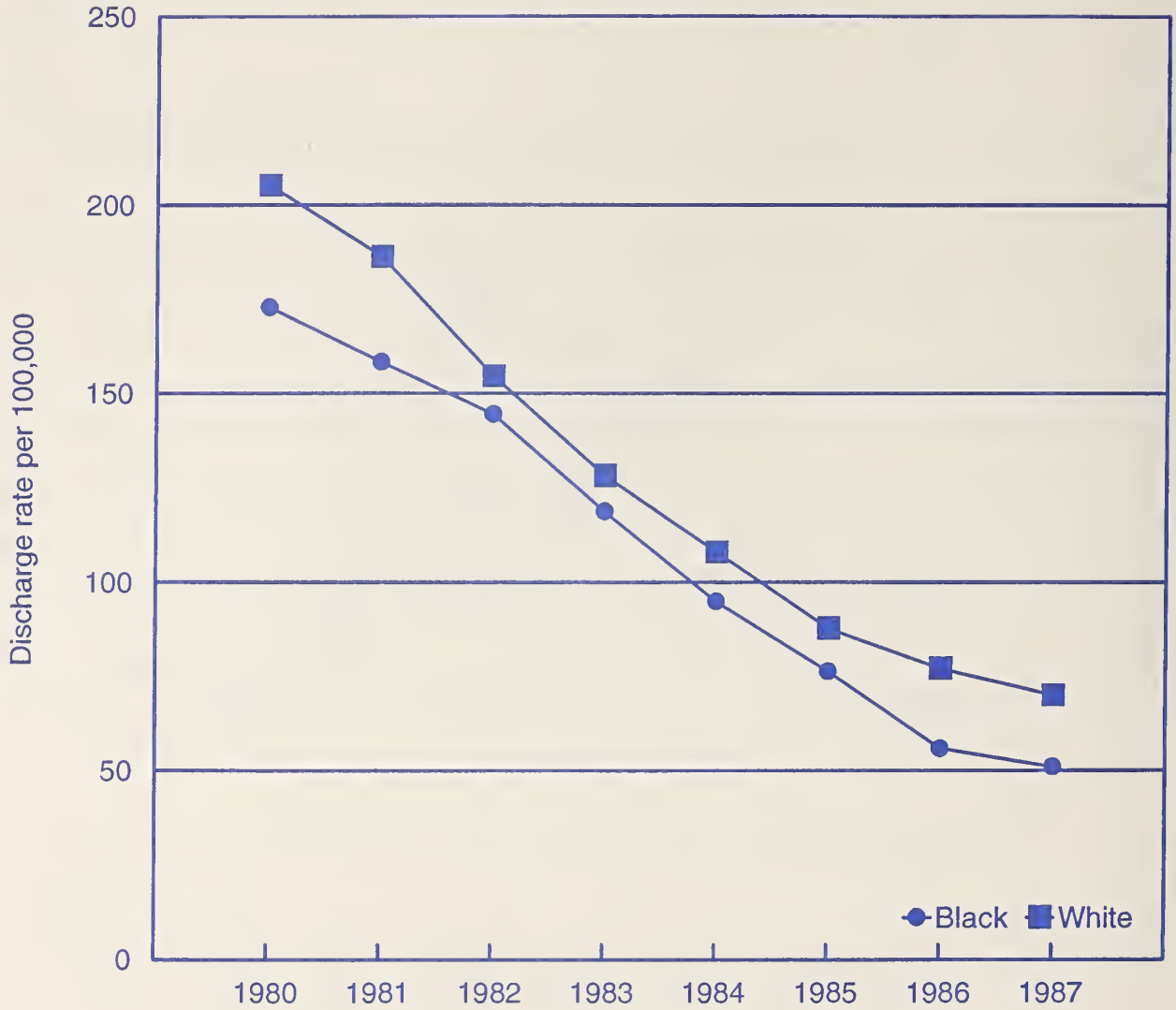
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	15.2 (10.7, 19.8)	13.4 (9.5, 17.4)	12.2 (8.8, 15.6)	8.4 (5.7, 11.0)	7.8 (4.9, 10.7)	5.7 (3.4, 7.9)	4.6 (2.6, 6.7)	4.8 (3.0, 6.5)	-17.2 (-19.5, -14.8)
White	11.2 (9.2, 13.1)	11.9 (9.8, 14.0)	9.9 (8.3, 11.6)	7.7 (6.3, 9.2)	6.1 (4.8, 7.3)	5.1 (3.9, 6.3)	3.9 (3.0, 4.9)	3.3 (2.4, 4.2)	-17.6 (-19.9, -15.2)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

146. Other female genital disorders



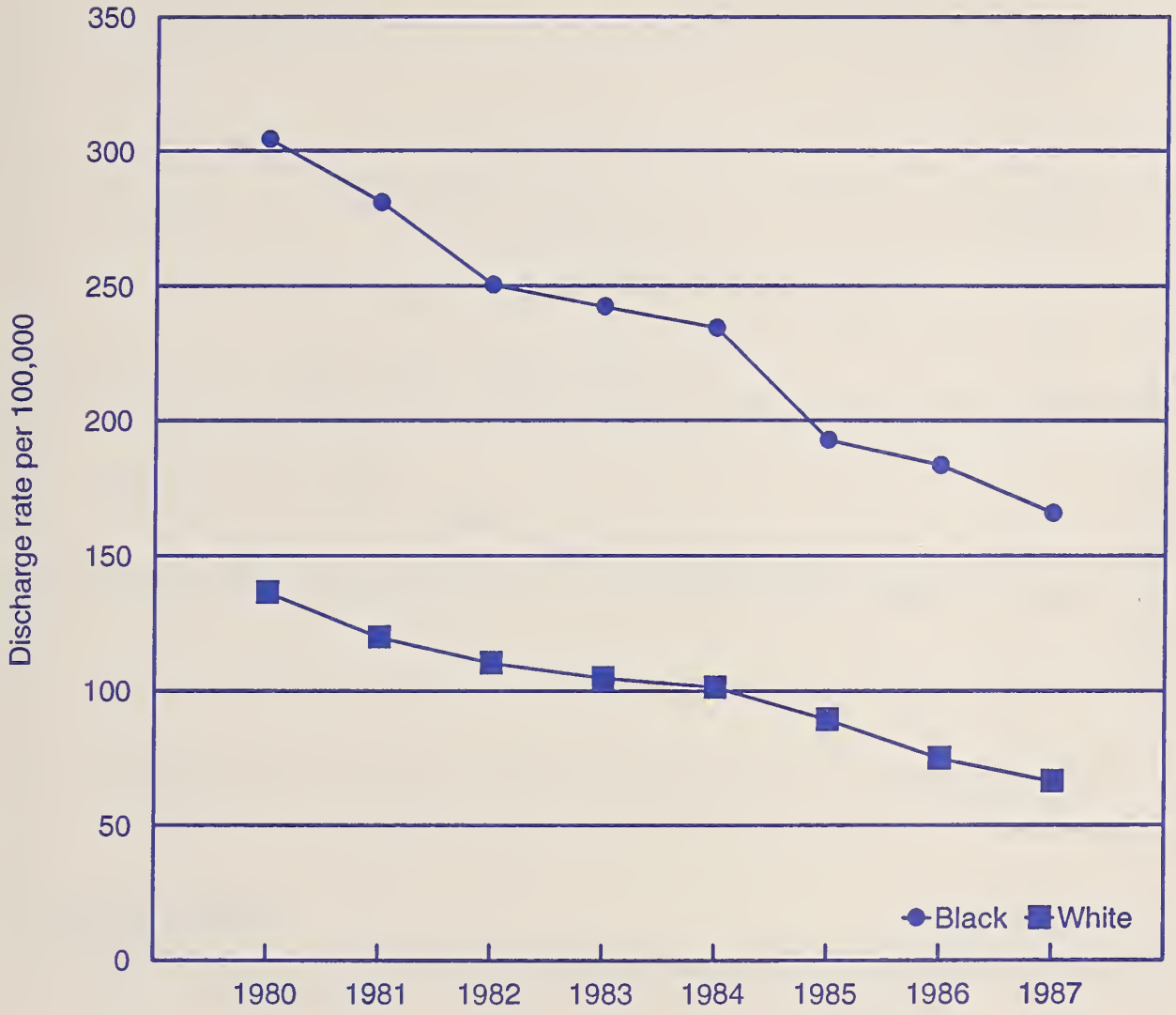
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	172.7 (143.9, 201.4)	158.2 (135.2, 181.1)	144.4 (122.6, 166.1)	118.7 (100.5, 137.0)	94.8 (77.5, 112.2)	76.2 (61.6, 90.7)	55.8 (43.1, 68.5)	50.9 (38.0, 63.9)	-17.2 (-19.3, -15.2)
White	205.2 (188.8, 221.7)	186.2 (171.8, 200.6)	154.6 (143.2, 166.0)	128.2 (118.7, 137.7)	108.0 (99.7, 116.3)	87.7 (80.8, 94.6)	77.1 (70.4, 83.8)	69.9 (63.3, 76.5)	-15.2 (-16.1, -14.2)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

147. Pregnancy with abortive outcome



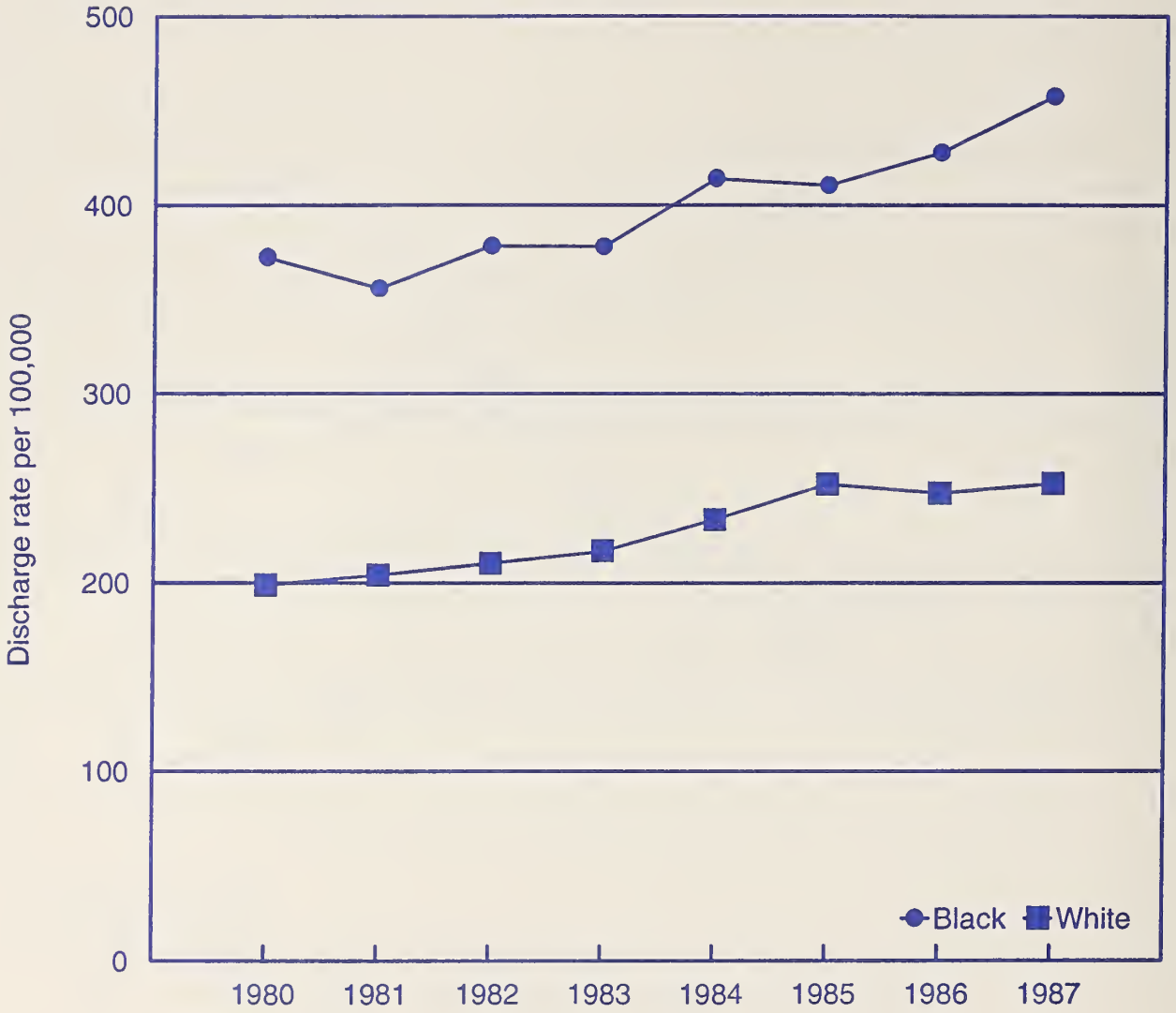
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	304.3 (231.4, 377.2)	280.8 (211.3, 350.3)	250.3 (189.5, 311.1)	242.2 (176.0, 308.3)	234.3 (173.2, 295.5)	192.7 (142.8, 242.5)	183.3 (134.2, 232.4)	165.6 (118.7, 212.5)	-8.2 (-9.3, -7.2)
White	136.3 (123.8, 148.8)	119.7 (110.5, 128.9)	110.1 (101.4, 118.9)	104.7 (94.9, 114.6)	101.2 (92.5, 109.9)	89.3 (80.9, 97.6)	74.9 (67.7, 82.0)	66.3 (59.1, 73.5)	-9.1 (-10.5, -7.7)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

148. Complications during pregnancy



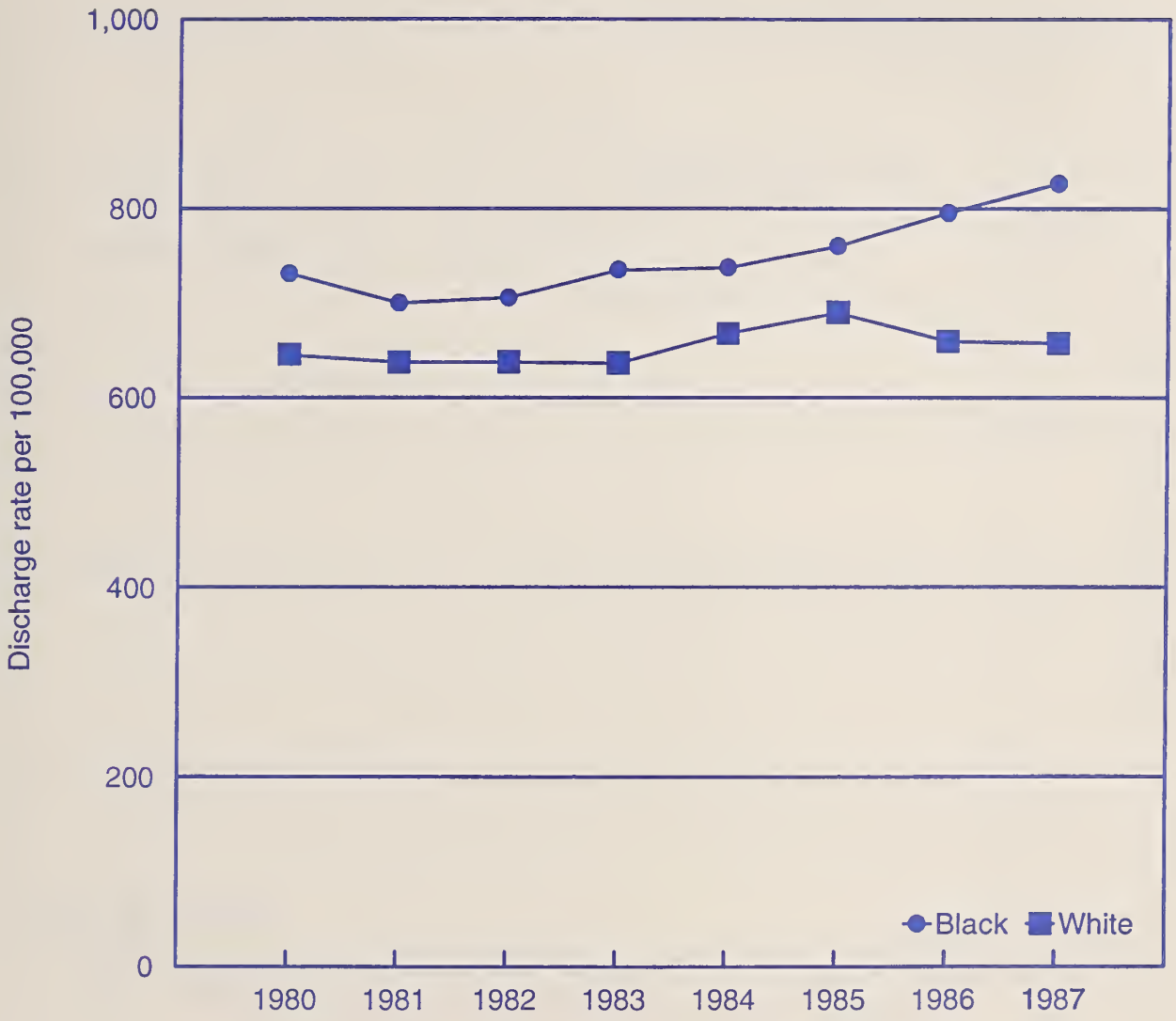
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	372.2 (305.1, 439.3)	355.6 (294.9, 416.3)	378.1 (308.1, 448.1)	377.8 (311.5, 444.1)	414.0 (336.7, 491.2)	410.4 (326.4, 494.5)	427.7 (328.7, 526.7)	457.4 (351.5, 563.2)	3.3 (2.3, 4.3)
White	198.8 (180.3, 217.3)	204.1 (183.7, 224.5)	210.4 (190.1, 230.6)	216.9 (194.8, 238.9)	233.5 (211.4, 255.7)	252.1 (224.0, 280.2)	247.3 (222.4, 272.2)	252.5 (224.7, 280.2)	3.9 (3.1, 4.8)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

149. Complications of birth, puerperium



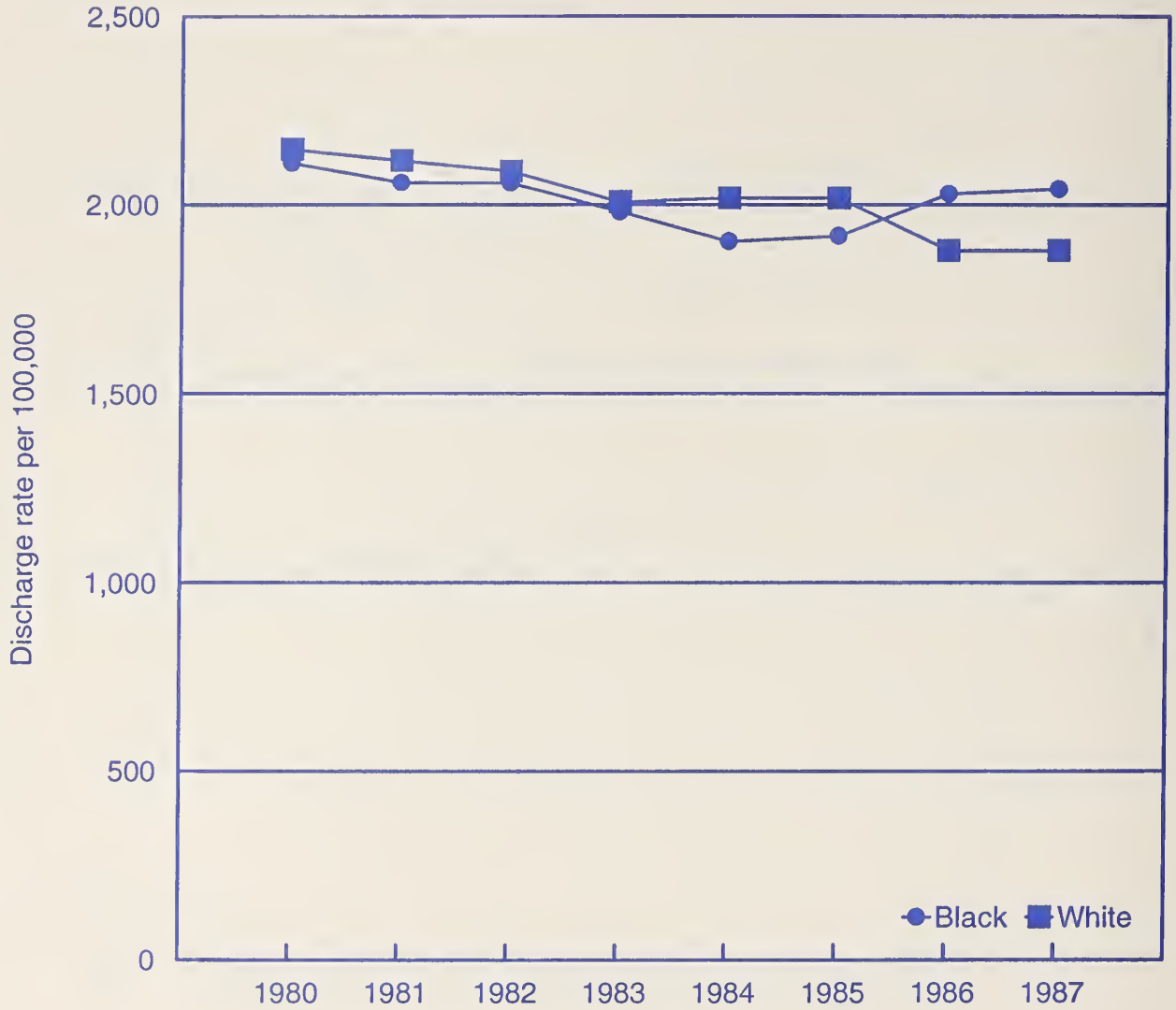
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	730.9 (593.5, 868.3)	699.9 (575.1, 824.8)	705.5 (571.1, 840.0)	735.0 (598.3, 871.6)	737.3 (592.0, 882.6)	759.8 (599.2, 920.4)	795.3 (614.8, 975.8)	826.2 (634.1, 1,018.3)	2.1 (1.2, 3.0)
White	645.3 (578.1, 712.4)	637.3 (573.0, 701.5)	637.6 (576.2, 699.1)	636.3 (580.1, 692.5)	667.8 (610.2, 725.4)	690.0 (626.9, 753.0)	659.4 (598.2, 720.7)	657.6 (594.4, 720.7)	0.7 (-0.0, 1.5)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

150. Normal delivery/liveborn



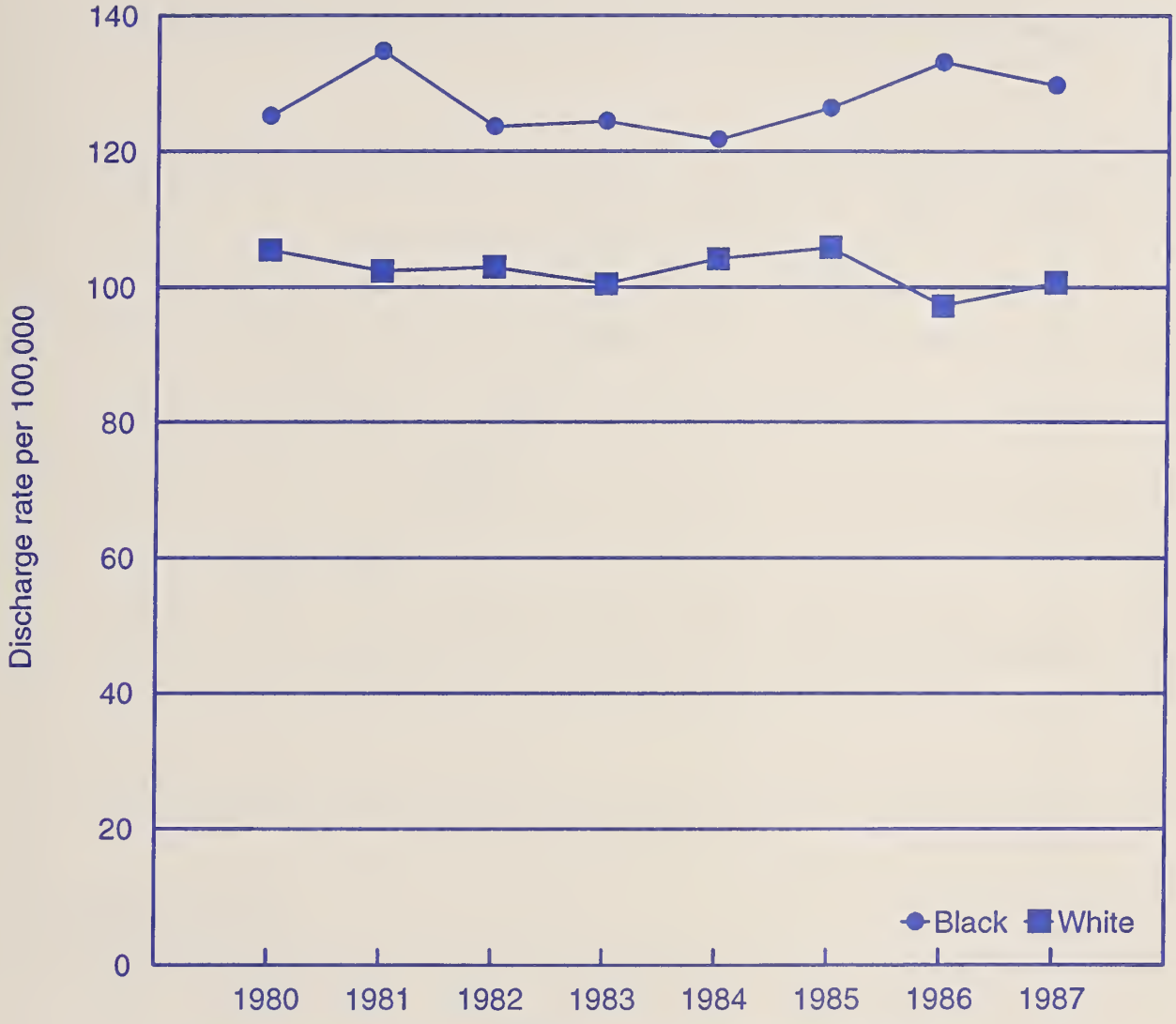
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	2,110.3 (1,761.4, 2,459.3)	2,058.1 (1,741.0, 2,375.1)	2,056.8 (1,700.5, 2,413.2)	1,980.0 (1,661.4, 2,298.5)	1,902.2 (1,579.6, 2,224.8)	1,916.5 (1,551.5, 2,281.5)	2,027.9 (1,600.7, 2,455.0)	2,040.8 (1,610.2, 2,471.4)	–0.7 (–1.7, 0.4)
White	2,147.7 (1,970.9, 2,324.5)	2,116.7 (1,935.7, 2,297.6)	2,088.4 (1,902.9, 2,273.8)	2,006.4 (1,844.9, 2,167.9)	2,016.8 (1,852.6, 2,180.9)	2,017.2 (1,844.7, 2,189.8)	1,877.7 (1,724.0, 2,031.4)	1,877.7 (1,724.0, 2,031.5)	–1.9 (–2.4, –1.4)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

151. Skin and subcutaneous infections



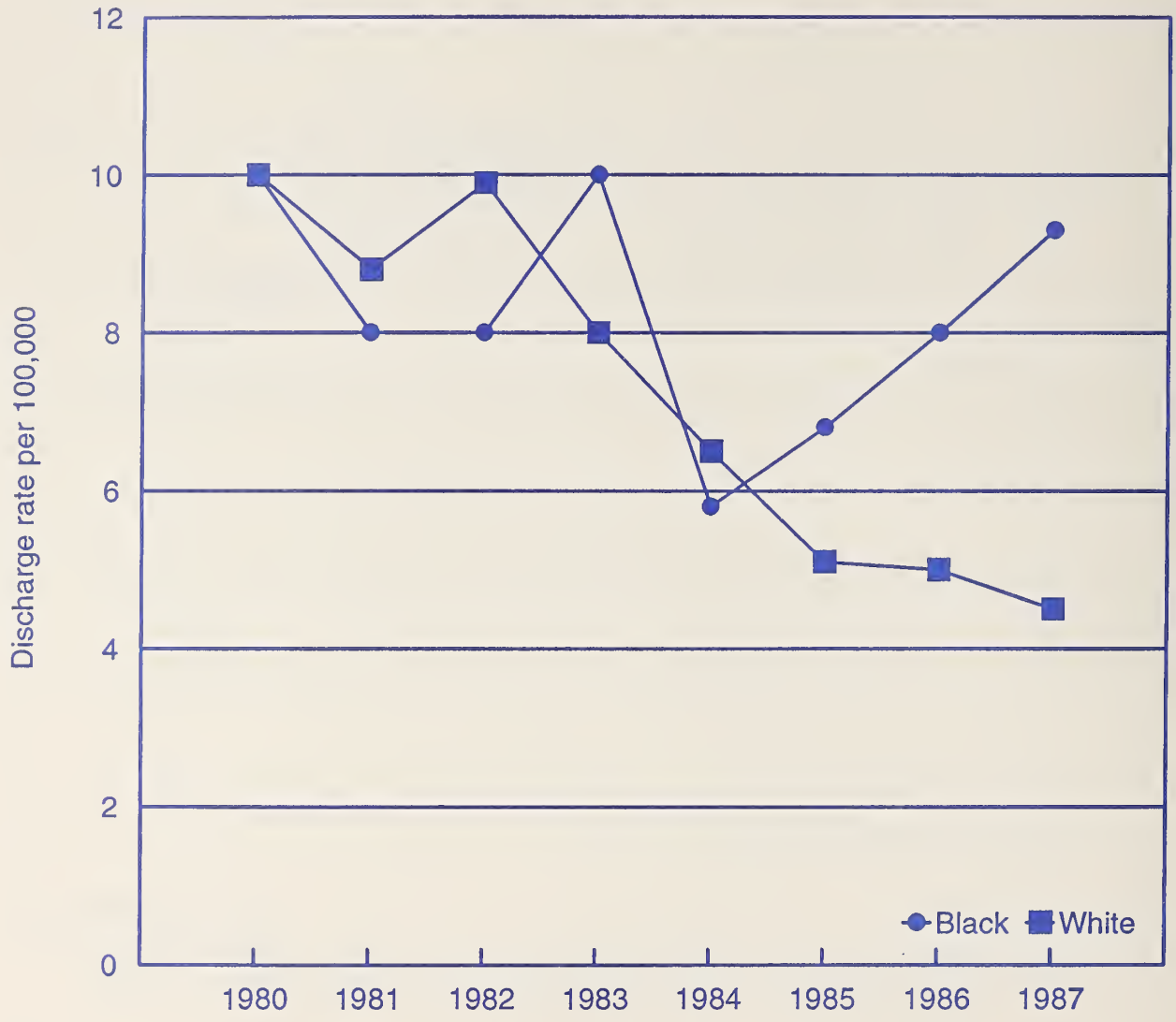
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	125.2 (99.9, 150.6)	134.7 (108.8, 160.6)	123.6 (103.9, 143.3)	124.4 (102.4, 146.3)	121.7 (103.2, 140.3)	126.4 (104.6, 148.3)	133.1 (103.8, 162.3)	129.7 (103.4, 156.0)	0.3 (-0.9, 1.5)
White	105.4 (99.7, 111.1)	102.3 (96.7, 107.9)	102.9 (97.4, 108.3)	100.4 (95.3, 105.4)	104.1 (98.3, 109.9)	105.8 (99.9, 111.8)	97.2 (91.3, 103.1)	100.6 (94.4, 106.8)	-0.5 (-1.4, 0.3)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

152. Other inflammatory conditions of skin



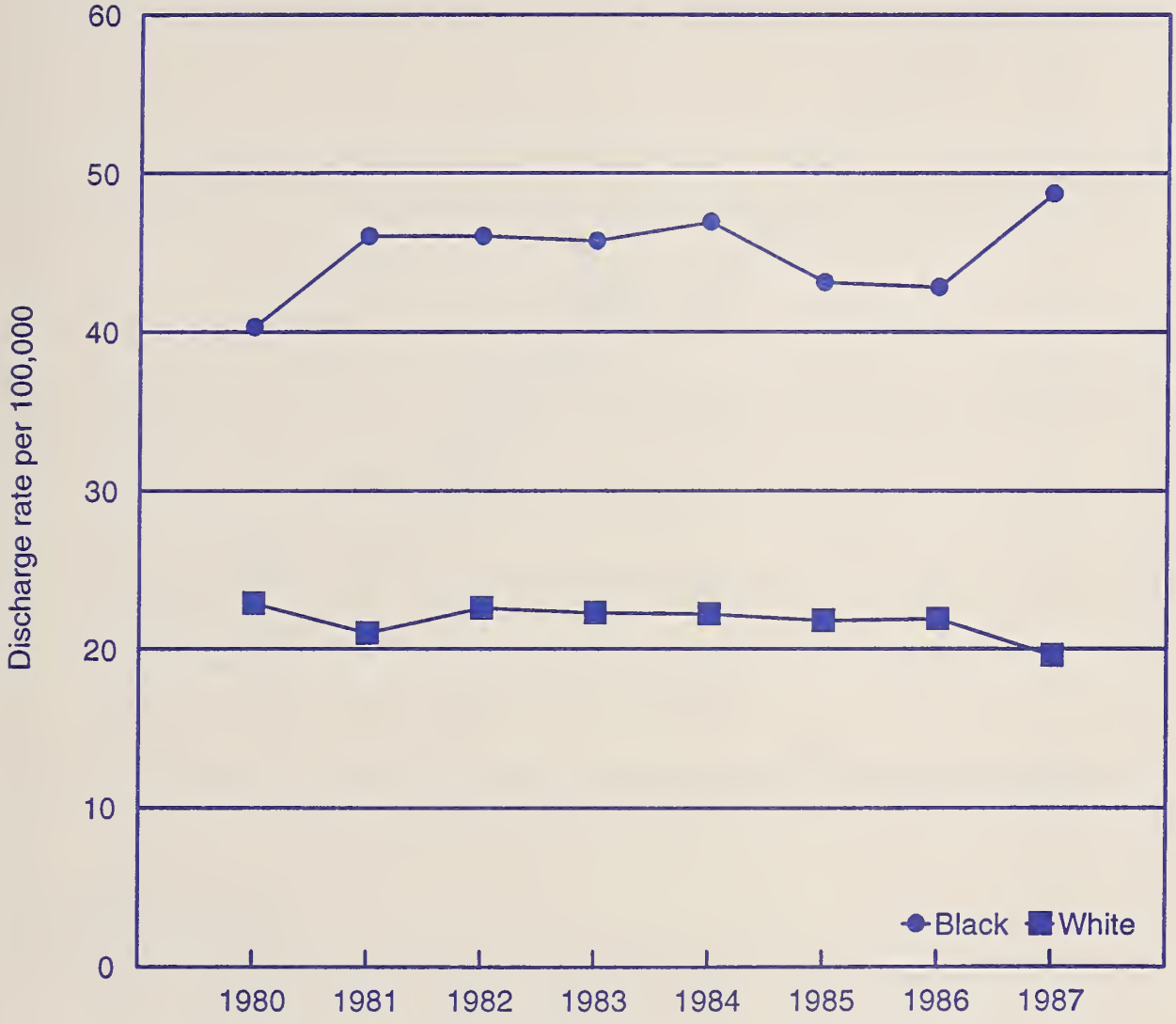
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	10.0 (6.5, 13.6)	8.0 (5.0, 11.0)	8.0 (5.8, 10.3)	10.0 (6.9, 13.2)	5.8 (3.7, 8.0)	6.8 (4.5, 9.1)	8.0 (5.5, 10.5)	9.3 (3.1, 15.4)	–1.9 (–7.5, 4.1)
White	10.0 (8.4, 11.6)	8.8 (7.3, 10.4)	9.9 (8.1, 11.7)	8.0 (6.6, 9.4)	6.5 (5.4, 7.6)	5.1 (4.1, 6.0)	5.0 (4.2, 5.9)	4.5 (2.9, 6.1)	–11.8 (–14.5, –9.1)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

153. Chronic ulcer of skin



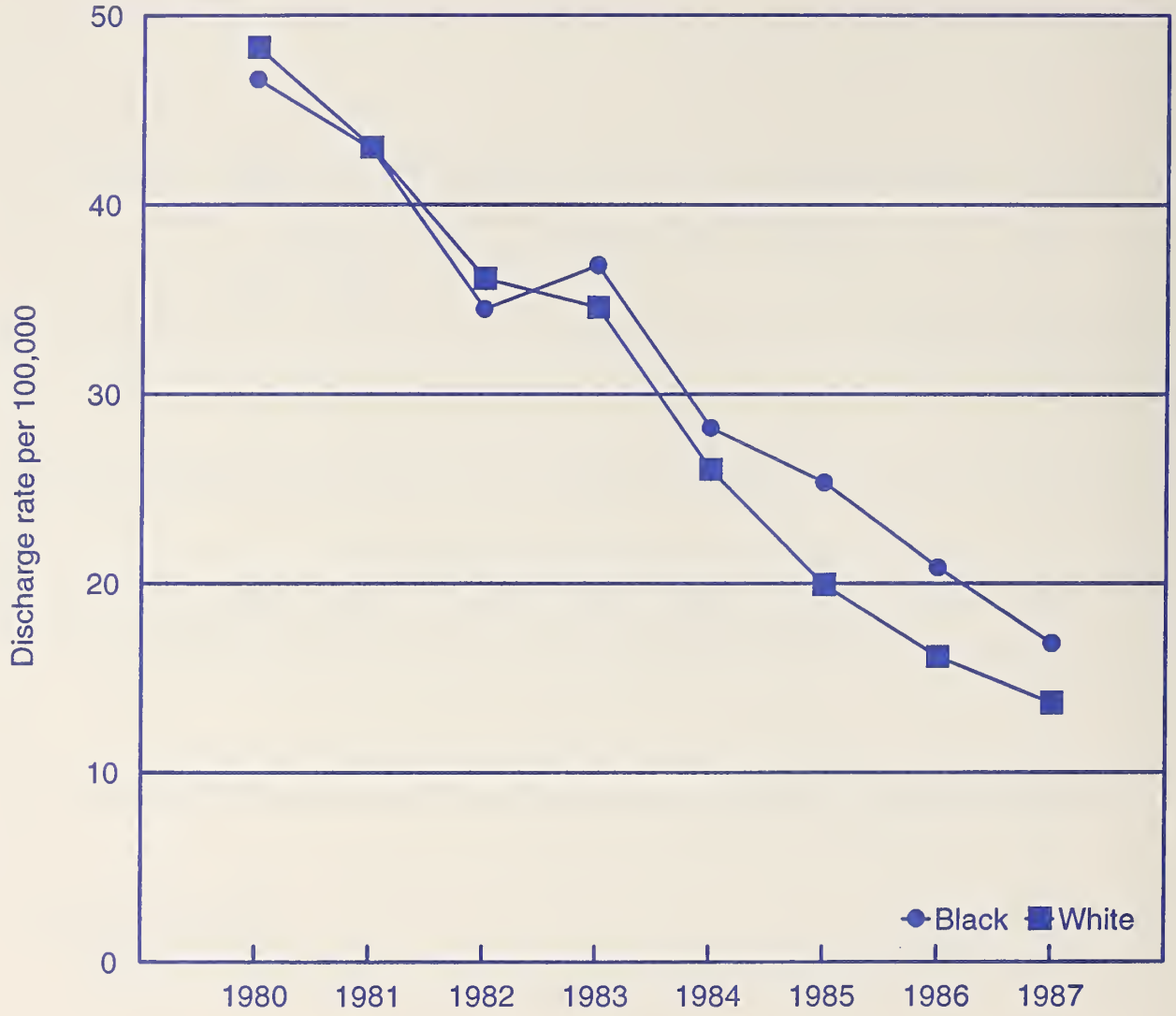
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	40.3 (32.4, 48.2)	46.0 (38.0, 54.0)	46.0 (36.8, 55.1)	45.7 (36.9, 54.5)	46.9 (37.7, 56.1)	43.1 (33.6, 52.5)	42.8 (33.1, 52.5)	48.7 (34.7, 62.7)	0.9 (–0.9, 2.8)
White	22.9 (21.0, 24.8)	21.0 (19.2, 22.7)	22.6 (20.6, 24.5)	22.3 (20.4, 24.1)	22.2 (20.4, 23.9)	21.8 (20.1, 23.5)	21.9 (20.2, 23.7)	19.6 (17.8, 21.4)	–1.2 (–2.4, 0.2)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

154. Other skin disorders



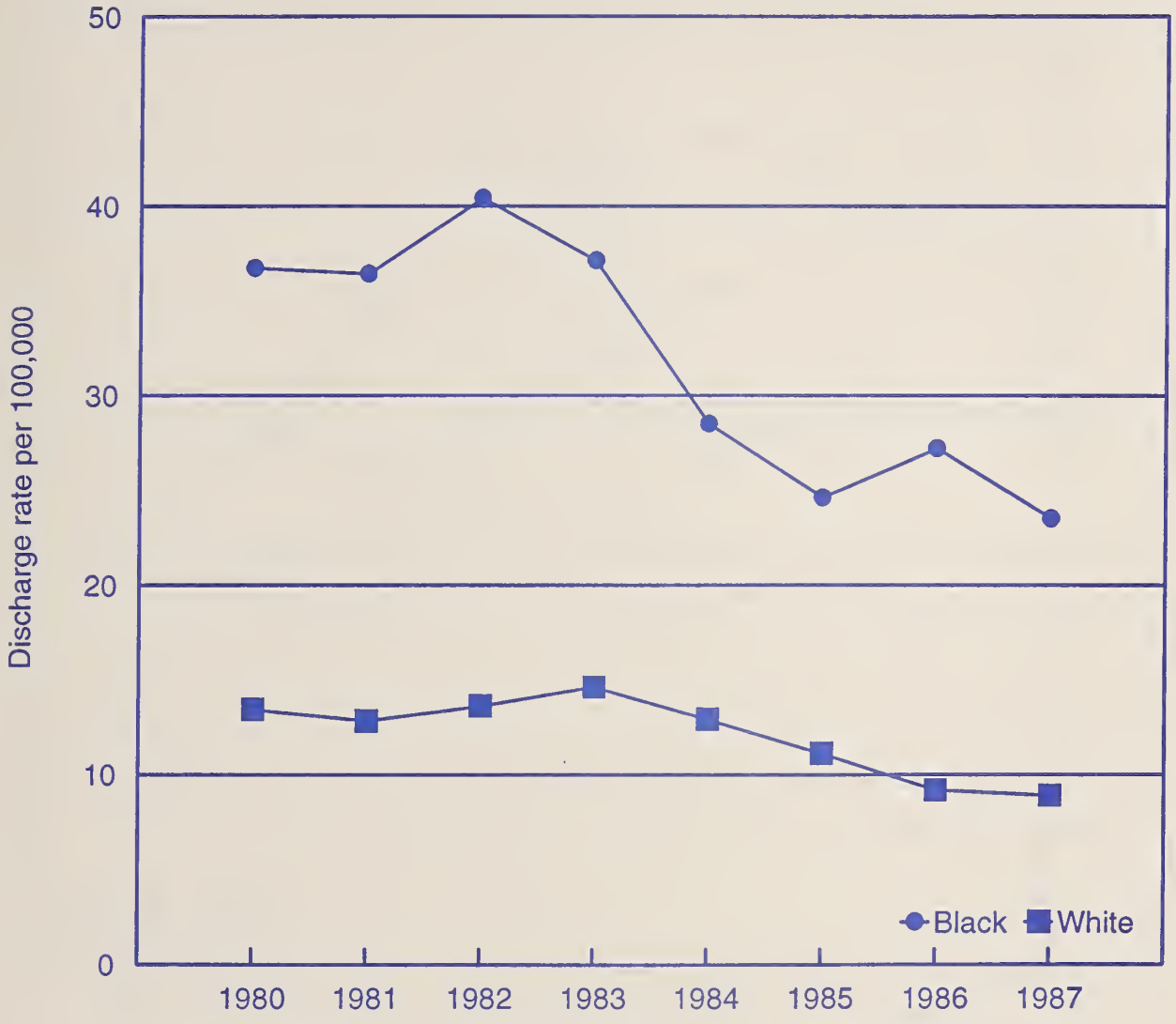
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	46.6 (37.1, 56.1)	42.9 (34.9, 50.9)	34.5 (27.7, 41.3)	36.8 (28.6, 45.0)	28.2 (21.6, 34.7)	25.3 (19.0, 31.6)	20.8 (15.7, 25.9)	16.8 (12.5, 21.0)	-13.3 (-15.3, -11.3)
White	48.3 (43.0, 53.6)	43.0 (39.3, 46.8)	36.1 (32.5, 39.6)	34.6 (29.1, 40.1)	26.0 (22.1, 30.0)	19.9 (15.6, 24.2)	16.1 (11.1, 21.0)	13.7 (9.5, 18.0)	-17.2 (-19.1, -15.2)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

155. Auto-immune and connective tissue disease



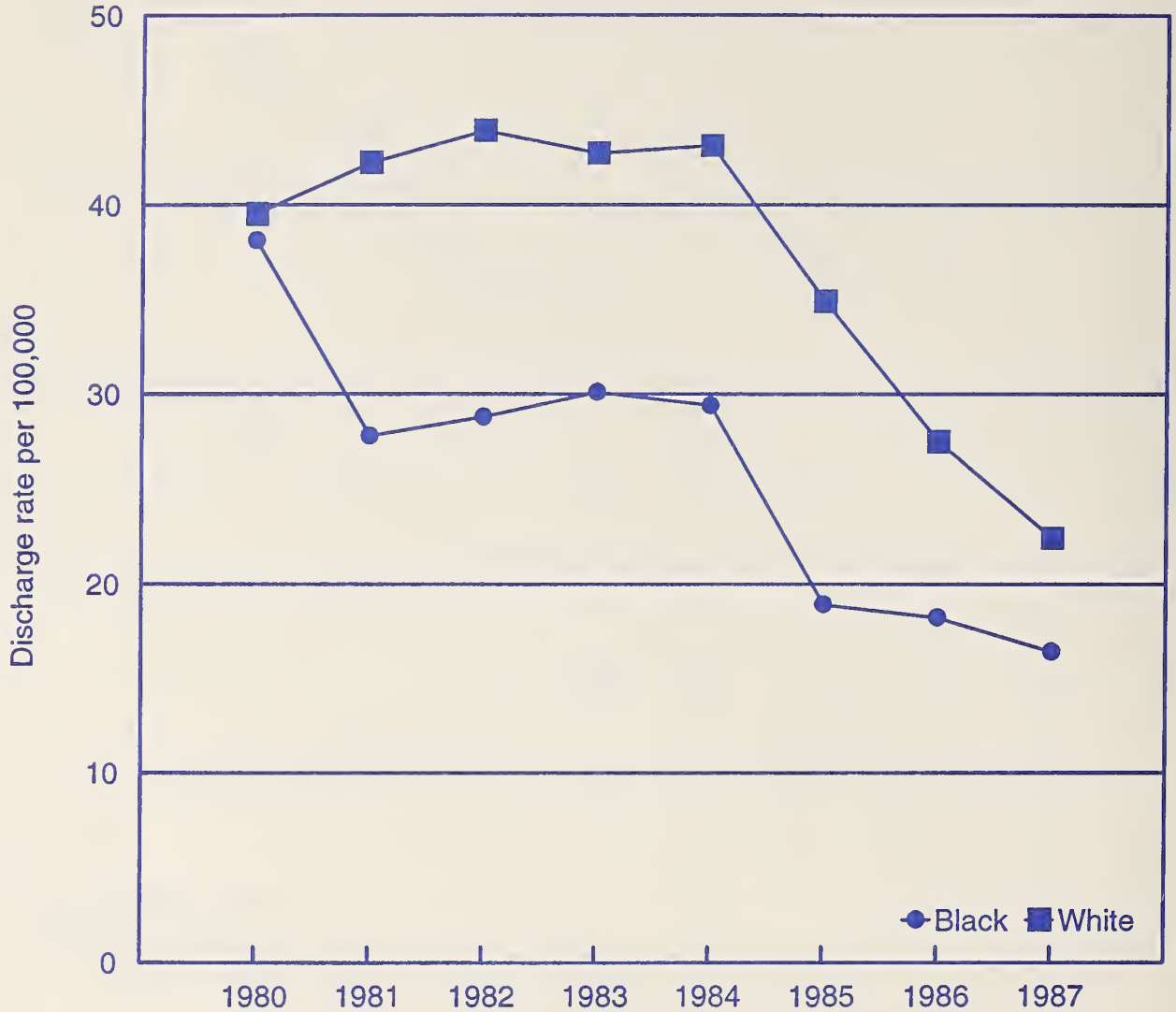
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	36.7 (27.6, 45.8)	36.4 (29.2, 43.6)	40.4 (32.8, 48.1)	37.1 (30.1, 44.1)	28.5 (23.0, 34.1)	24.6 (19.3, 29.9)	27.2 (20.5, 33.9)	23.5 (16.7, 30.2)	-7.3 (-10.3, -4.1)
White	13.4 (12.0, 14.9)	12.8 (11.4, 14.3)	13.6 (12.1, 15.0)	14.6 (13.0, 16.2)	12.9 (11.3, 14.5)	11.1 (9.6, 12.6)	9.2 (8.1, 10.4)	8.9 (7.6, 10.1)	-6.1 (-9.2, -2.9)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

156. Acquired foot deformities



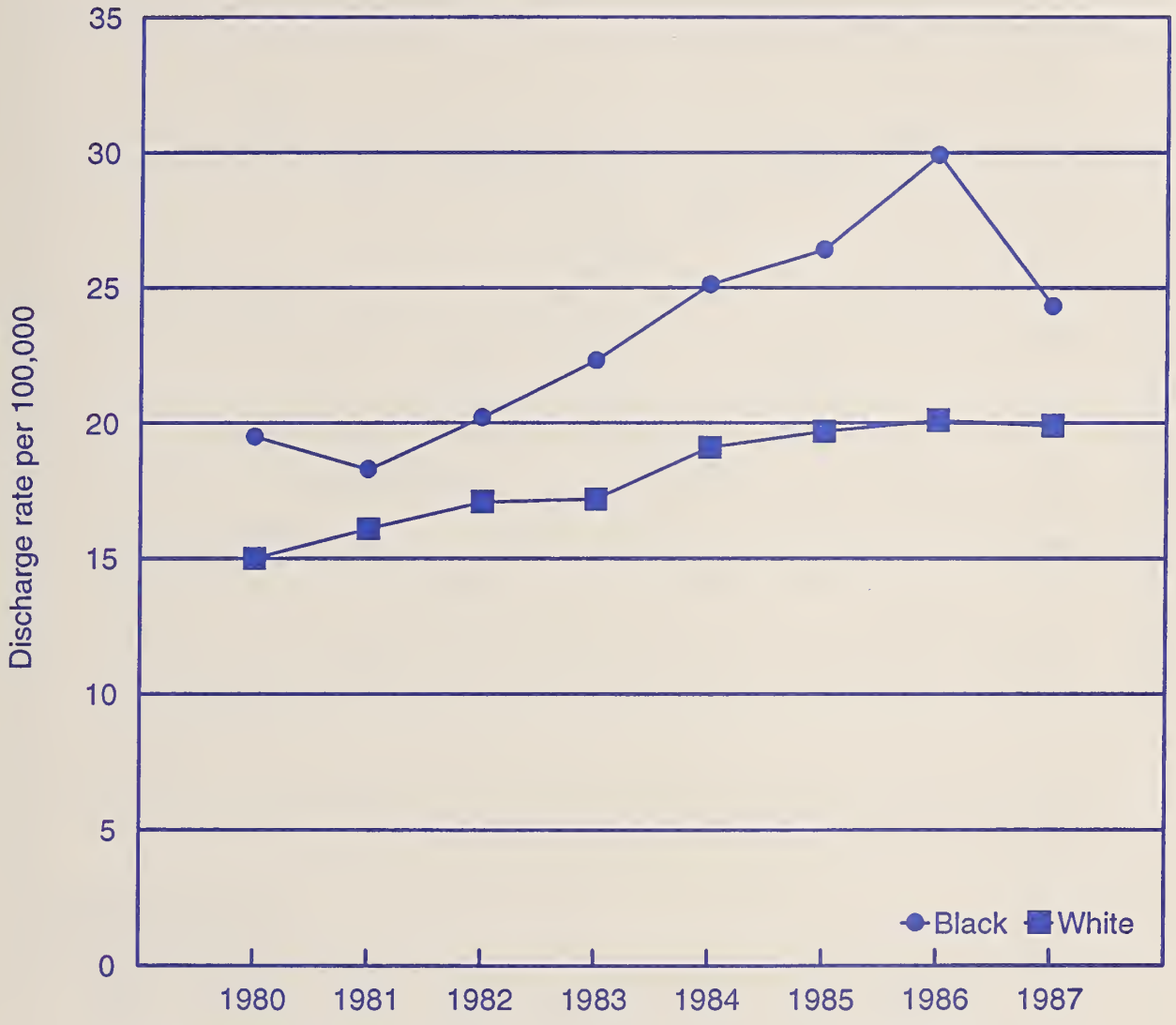
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	38.1 (27.5, 48.6)	27.8 (20.3, 35.2)	28.8 (20.7, 36.9)	30.1 (21.2, 39.0)	29.4 (22.1, 36.7)	18.9 (13.5, 24.2)	18.2 (13.3, 23.1)	16.4 (11.8, 20.9)	-10.5 (-14.1, -6.7)
White	39.5 (35.0, 43.9)	42.2 (37.9, 46.6)	43.9 (39.2, 48.6)	42.7 (38.3, 47.1)	43.1 (38.1, 48.1)	34.9 (30.8, 39.0)	27.5 (24.3, 30.7)	22.4 (19.0, 25.8)	-7.8 (-12.2, -3.1)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

157. Infective arthritis and osteomyelitis



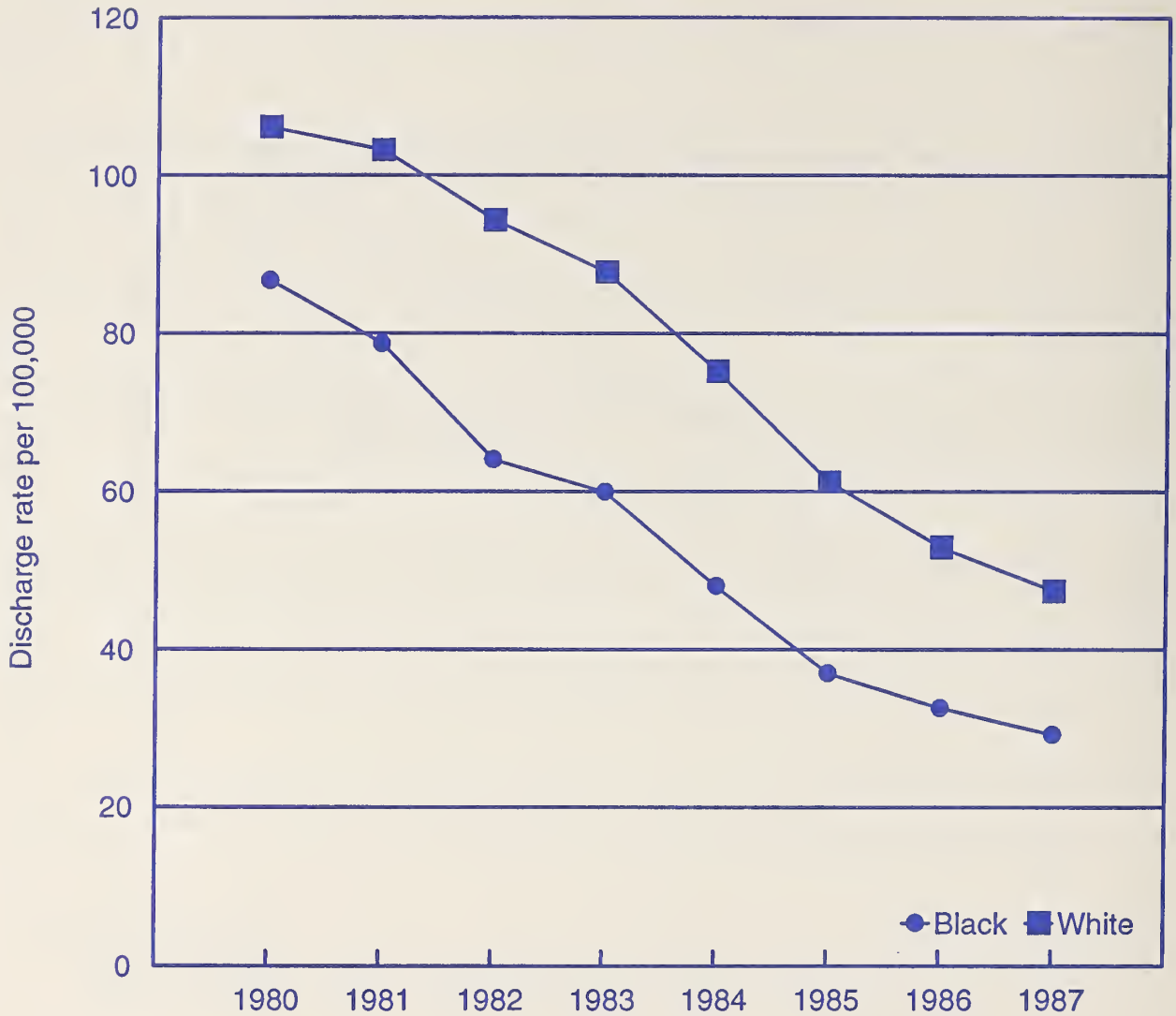
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	19.5 (14.7, 24.3)	18.3 (14.2, 22.3)	20.2 (15.0, 25.5)	22.3 (17.4, 27.1)	25.1 (19.8, 30.4)	26.4 (20.4, 32.3)	29.9 (23.3, 36.5)	24.3 (17.5, 31.2)	6.0 (3.1, 9.1)
White	15.0 (13.6, 16.4)	16.1 (14.6, 17.6)	17.1 (15.5, 18.7)	17.2 (15.8, 18.7)	19.1 (17.4, 20.9)	19.7 (17.9, 21.5)	20.1 (18.3, 21.9)	19.9 (18.0, 21.9)	4.4 (3.4, 5.4)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

158. Other joint disorders (not trauma)



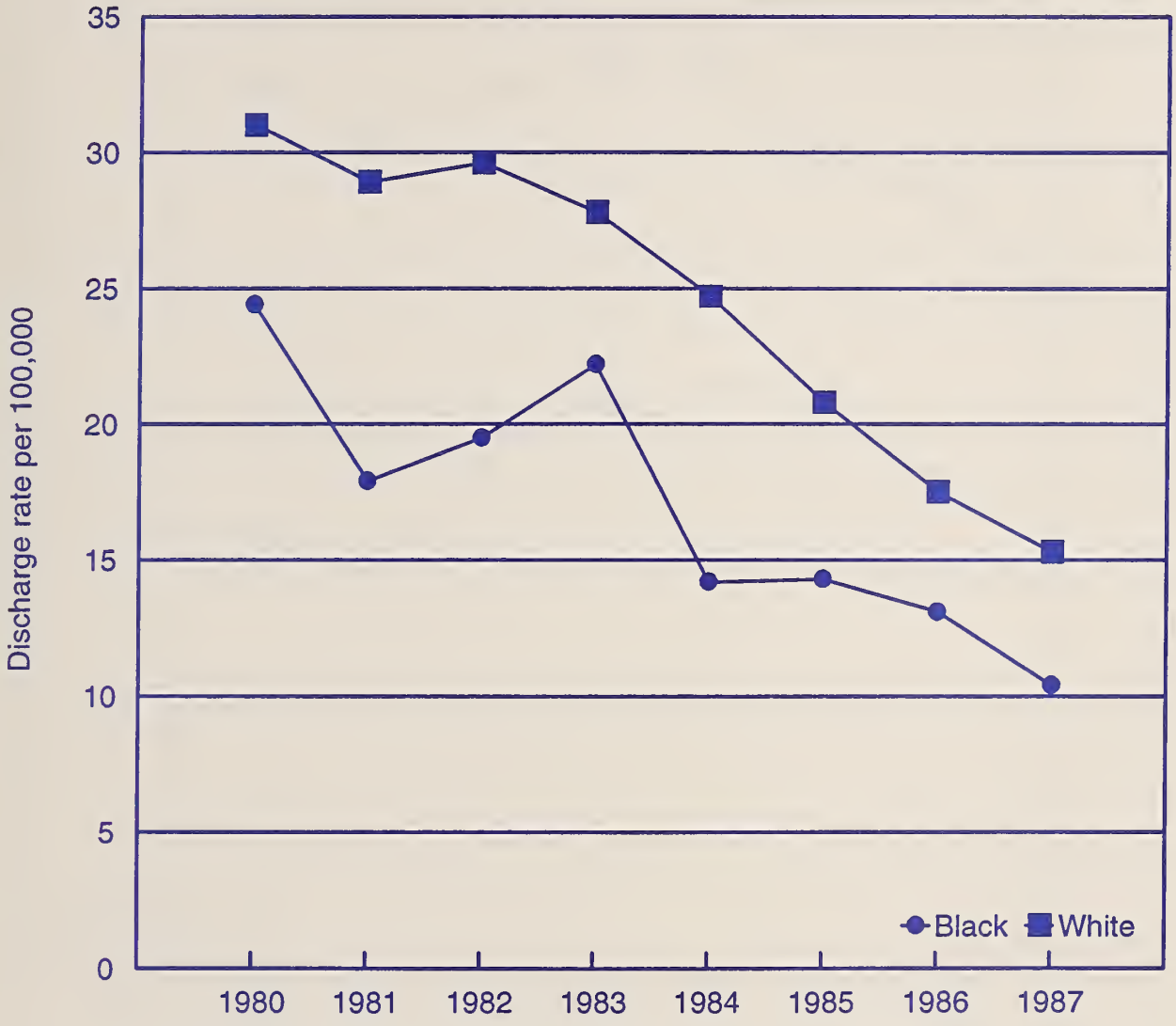
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	86.7 (72.2, 101.2)	78.7 (65.9, 91.6)	64.0 (51.9, 76.2)	59.9 (50.2, 69.5)	48.0 (40.1, 55.9)	37.0 (29.8, 44.2)	32.6 (25.2, 40.0)	29.2 (22.5, 36.0)	-15.2 (-16.6, -13.9)
White	106.1 (98.2, 114.1)	103.2 (95.9, 110.6)	94.3 (87.0, 101.7)	87.8 (81.0, 94.6)	75.2 (68.8, 81.7)	61.2 (54.8, 67.6)	52.9 (46.3, 59.5)	47.4 (40.5, 54.4)	-11.7 (-13.4, -9.9)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

159. Rheumatoid arthritis and related conditions



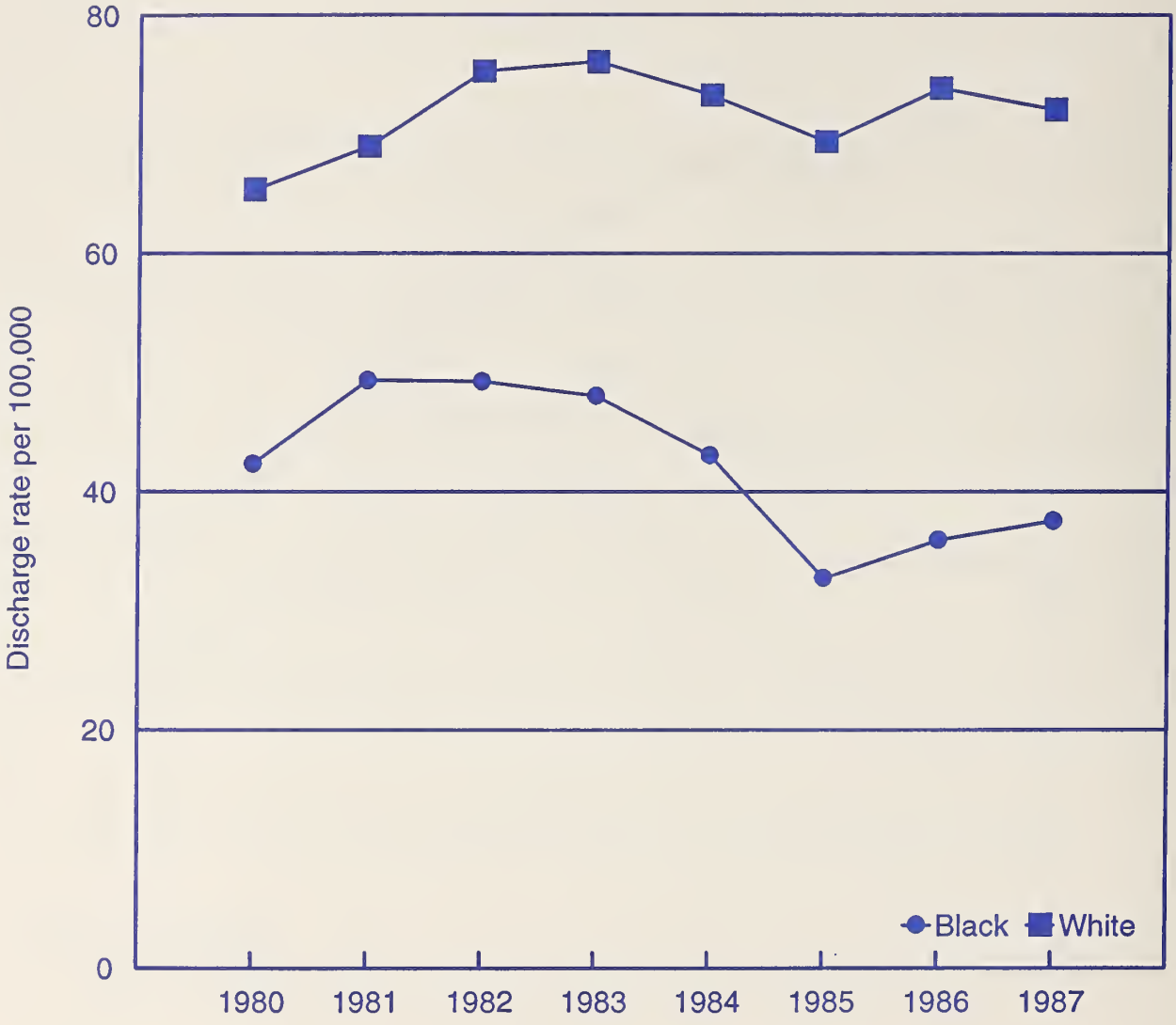
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	24.4 (18.9, 29.9)	17.9 (13.4, 22.5)	19.5 (13.8, 25.2)	22.2 (17.6, 26.9)	14.2 (10.8, 17.6)	14.3 (10.8, 17.9)	13.1 (9.1, 17.1)	10.4 (7.3, 13.6)	-10.1 (-13.7, -6.3)
White	31.0 (26.2, 35.9)	28.9 (24.4, 33.4)	29.6 (25.4, 33.8)	27.8 (23.7, 31.9)	24.7 (20.7, 28.7)	20.8 (17.2, 24.4)	17.5 (14.0, 21.0)	15.3 (11.3, 19.2)	-9.8 (-12.2, -7.4)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

160. Osteoarthritis



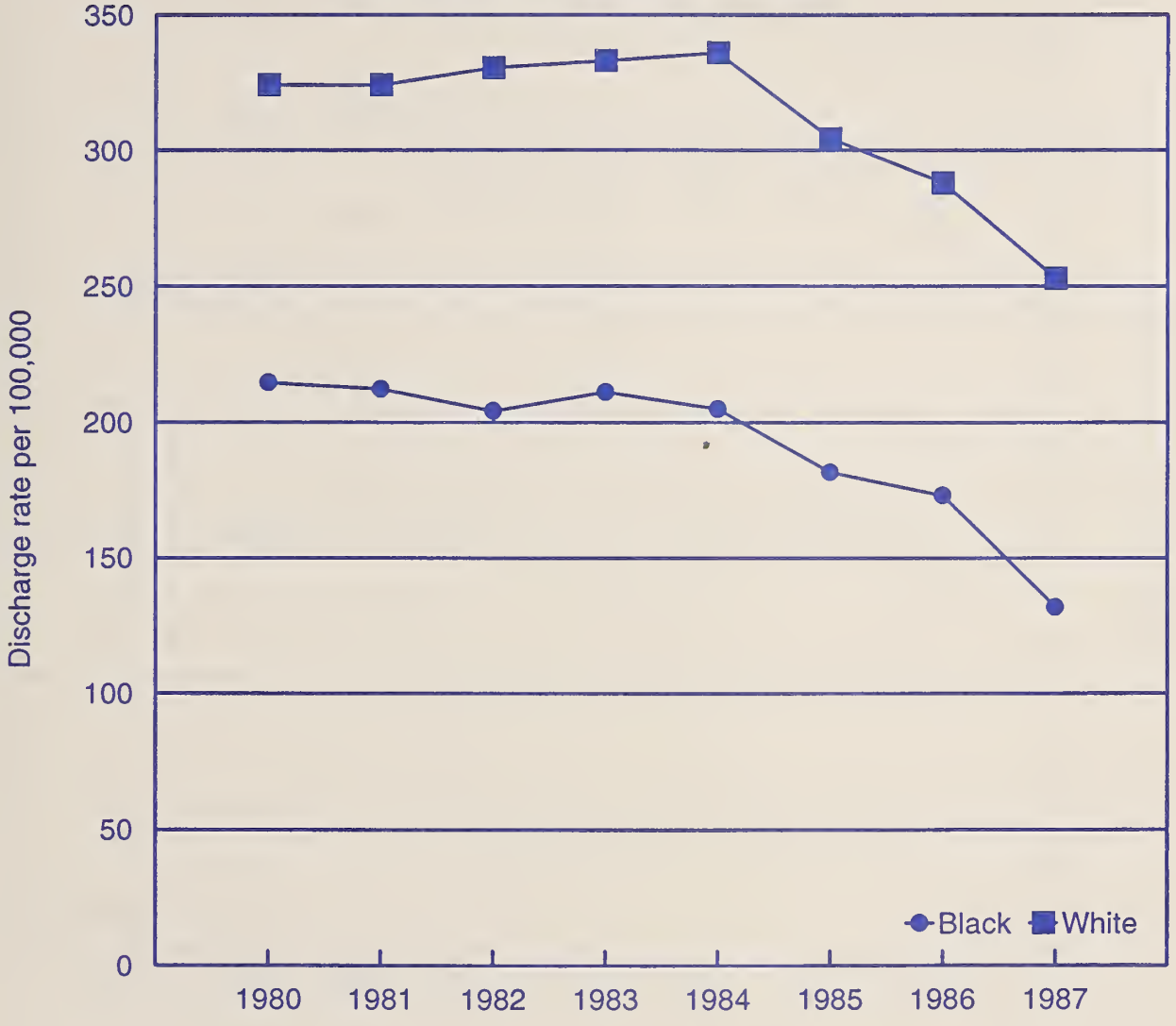
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	42.3 (33.7, 50.9)	49.3 (40.0, 58.7)	49.2 (40.5, 57.9)	48.0 (37.9, 58.1)	43.0 (35.7, 50.3)	32.7 (25.4, 40.1)	35.9 (28.1, 43.6)	37.5 (29.6, 45.3)	–4.4 (–7.8, –0.9)
White	65.3 (59.1, 71.5)	68.9 (62.8, 75.0)	75.2 (69.2, 81.2)	76.0 (69.8, 82.1)	73.2 (66.9, 79.4)	69.3 (62.6, 76.0)	73.8 (65.3, 82.3)	72.0 (64.0, 79.9)	0.9 (–0.6, 2.4)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

161. Spondylosis, intervertebral disc disorders, cervical disorders, other back pain



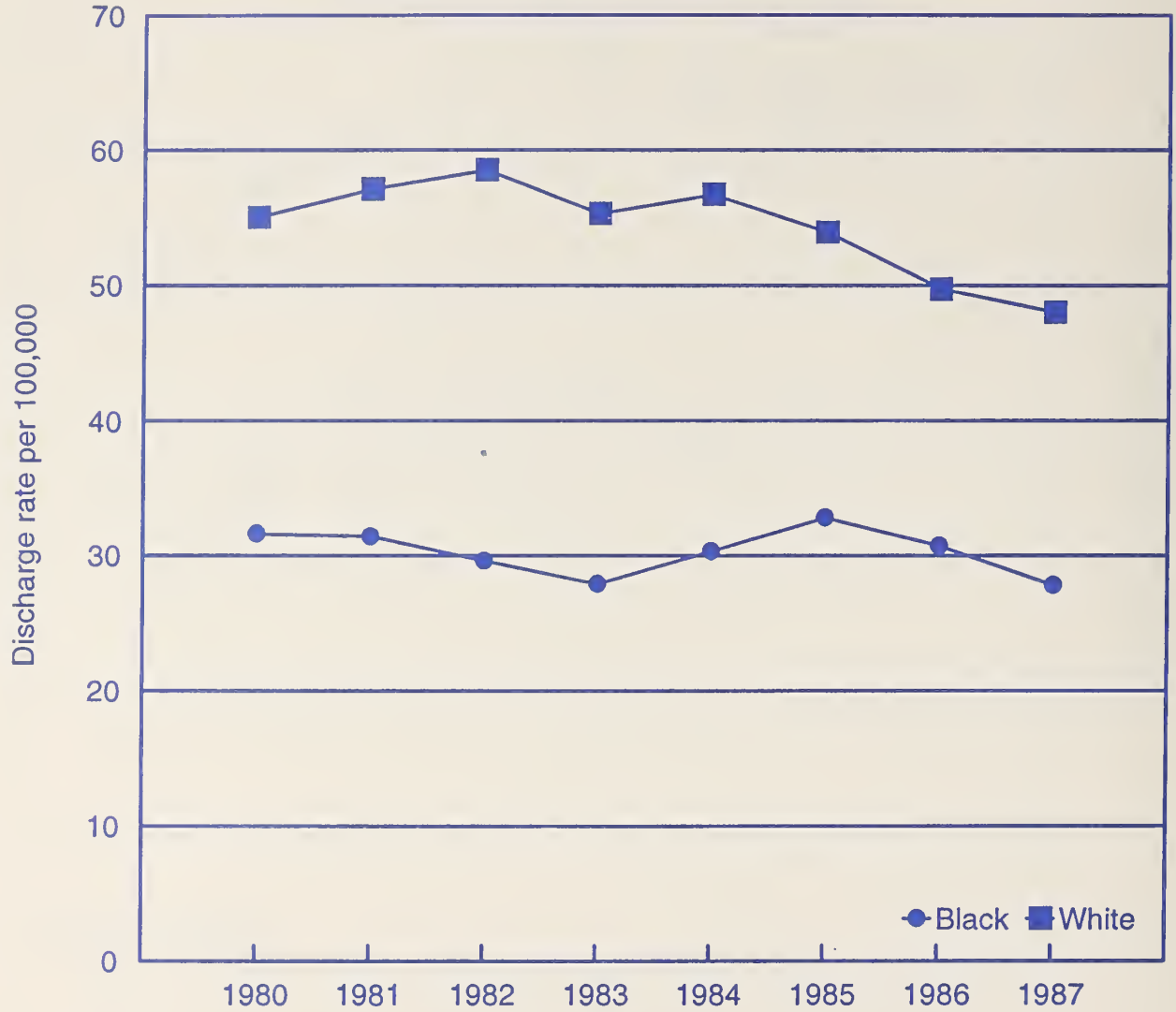
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	214.6 (172.8, 256.3)	212.2 (171.6, 252.8)	204.1 (170.4, 237.7)	211.1 (178.2, 244.0)	204.8 (172.5, 237.0)	181.6 (151.2, 211.9)	173.0 (141.9, 204.2)	131.7 (106.8, 156.6)	–5.6 (–8.3, –2.8)
White	324.1 (297.4, 350.9)	324.0 (299.3, 348.7)	330.3 (305.1, 355.5)	332.9 (309.0, 356.8)	335.9 (311.5, 360.3)	304.3 (280.2, 328.3)	287.9 (261.7, 314.2)	252.8 (228.2, 277.4)	–3.0 (–5.0, –1.0)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

162. Osteoporosis and other disorders of bone and cartilage



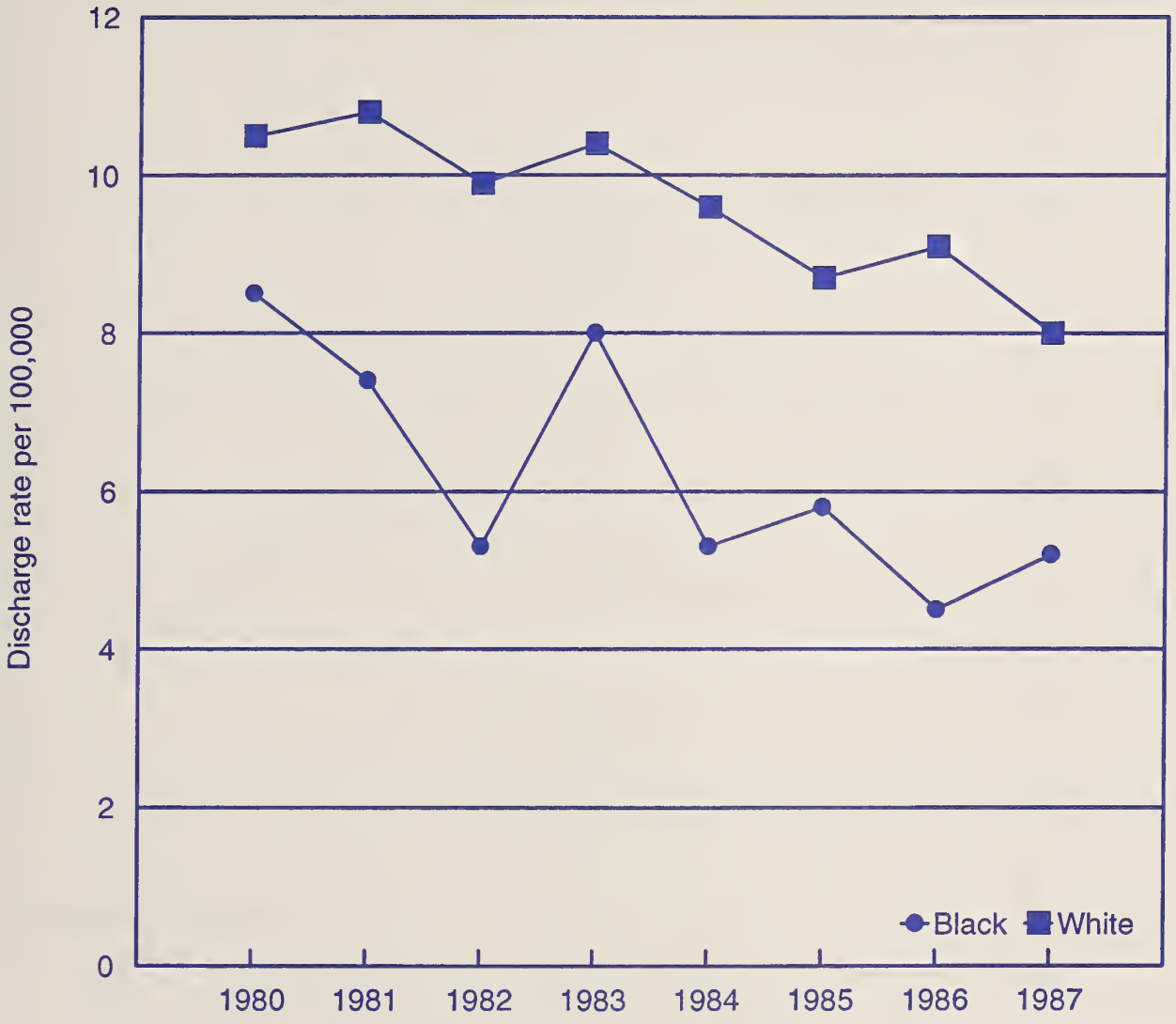
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	31.6 (24.4, 38.8)	31.4 (25.1, 37.6)	29.6 (23.0, 36.1)	27.9 (22.1, 33.6)	30.3 (24.2, 36.4)	32.8 (26.2, 39.5)	30.7 (23.6, 37.8)	27.8 (20.9, 34.6)	-0.7 (-2.6, 1.1)
White	55.0 (50.9, 59.0)	57.1 (53.3, 60.9)	58.5 (54.6, 62.4)	55.3 (51.8, 58.7)	56.7 (53.1, 60.4)	53.9 (49.3, 58.5)	49.7 (45.8, 53.7)	48.0 (44.1, 51.8)	-2.2 (-3.6, -0.8)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

163. Other acquired deformities



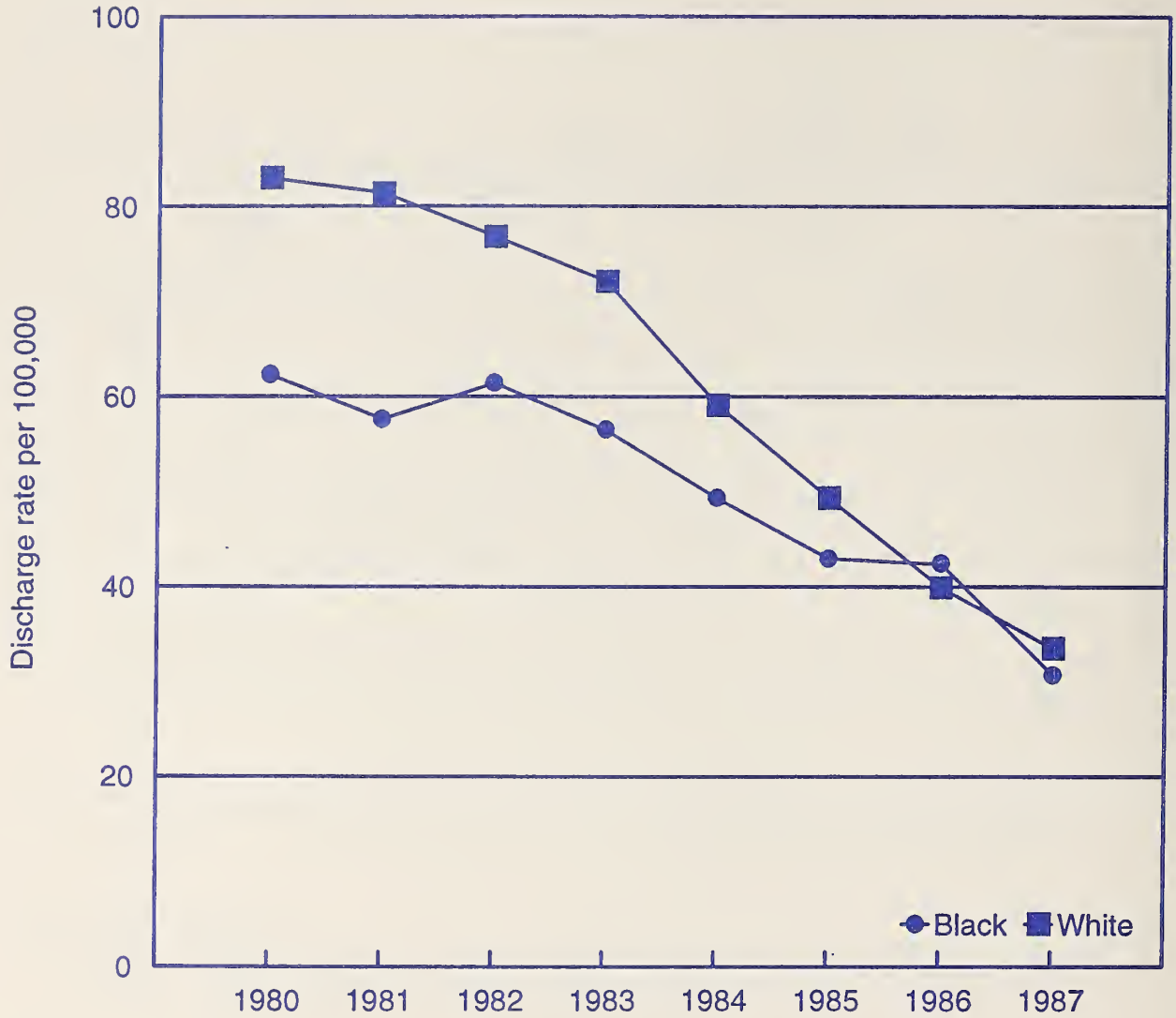
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	8.5 (5.4, 11.6)	7.4 (5.1, 9.6)	5.3 (3.4, 7.2)	8.0 (5.5, 10.6)	5.3 (3.3, 7.3)	5.8 (4.0, 7.6)	4.5 (2.9, 6.0)	5.2 (3.2, 7.3)	-7.0 (-11.5, -2.2)
White	10.5 (9.0, 11.9)	10.8 (9.3, 12.3)	9.9 (8.6, 11.3)	10.4 (9.0, 11.7)	9.6 (8.3, 10.9)	8.7 (7.5, 9.9)	9.1 (7.8, 10.4)	8.0 (6.6, 9.4)	-3.8 (-5.2, -2.4)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

164. Other muscle, bone, connective tissue disease



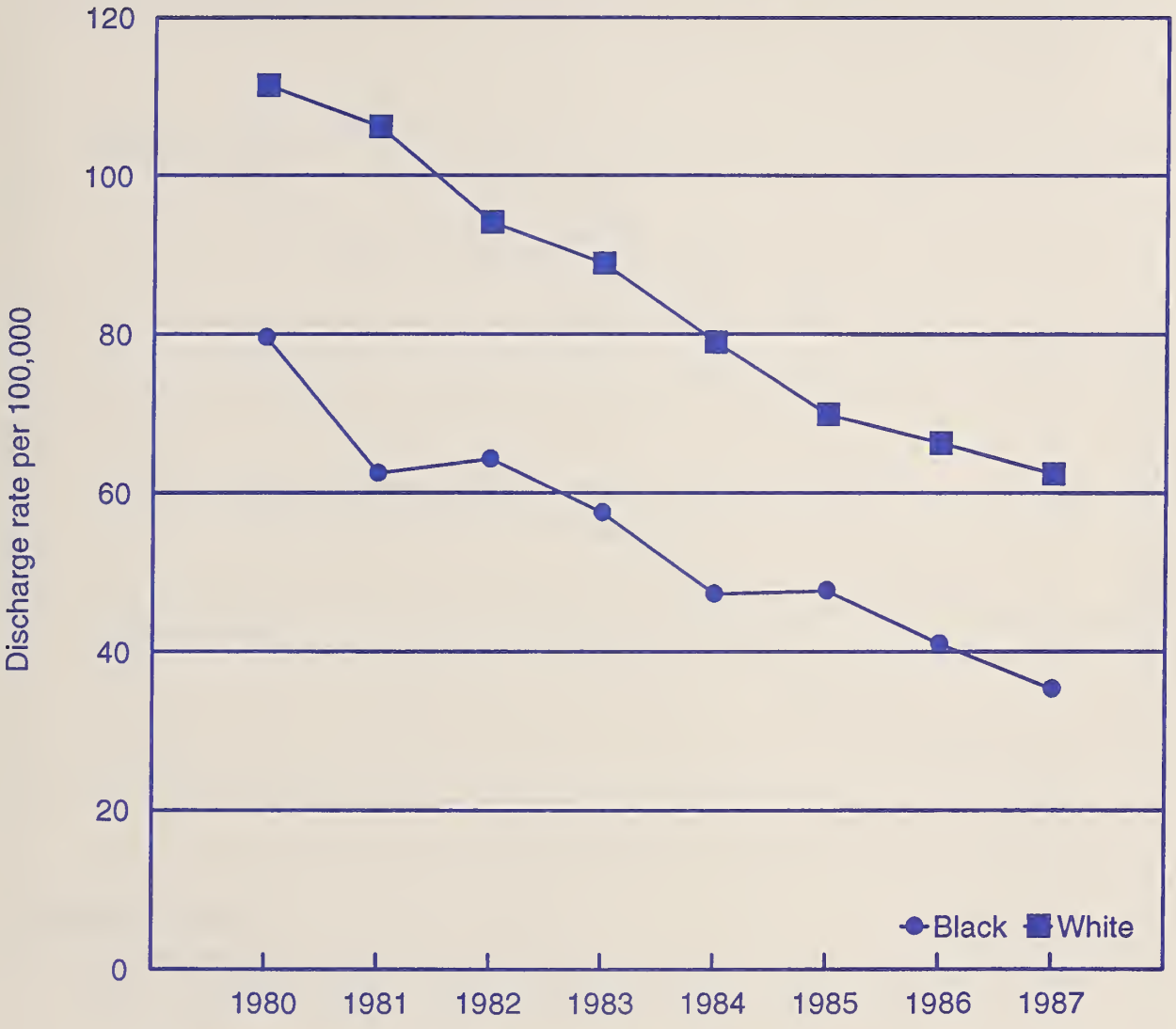
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	62.3 (51.8, 72.8)	57.6 (47.8, 67.4)	61.4 (51.7, 71.1)	56.5 (48.9, 64.1)	49.3 (41.2, 57.4)	42.9 (35.3, 50.4)	42.4 (33.8, 50.9)	30.7 (24.9, 36.5)	-8.8 (-11.5, -6.0)
White	83.0 (77.0, 89.0)	81.4 (75.9, 86.9)	76.8 (71.5, 82.1)	72.1 (66.9, 77.3)	59.1 (54.0, 64.2)	49.3 (44.0, 54.5)	39.9 (34.5, 45.3)	33.5 (28.3, 38.8)	-12.7 (-15.2, -10.2)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

165. Congenital anomalies



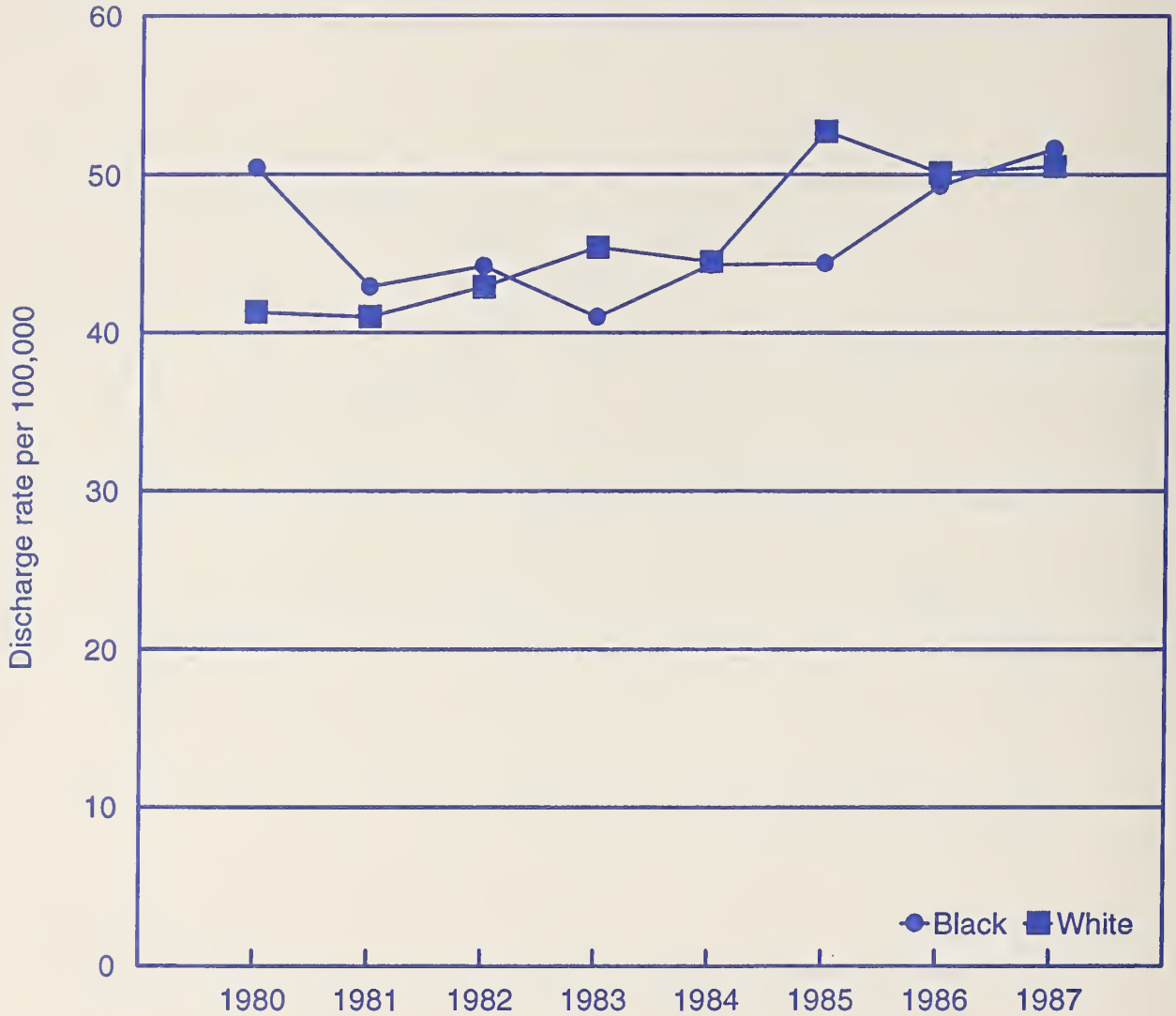
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	79.6 (62.4, 96.9)	62.5 (51.8, 73.2)	64.3 (51.0, 77.7)	57.5 (44.9, 70.0)	47.3 (35.7, 59.0)	47.7 (36.4, 59.1)	41.0 (30.9, 51.2)	35.3 (27.4, 43.2)	-10.0 (-11.6, -8.4)
White	111.4 (97.3, 125.5)	106.2 (93.7, 118.7)	94.1 (81.1, 107.1)	88.9 (77.7, 100.0)	79.0 (68.1, 89.8)	69.9 (59.6, 80.2)	66.3 (55.8, 76.9)	62.4 (52.0, 72.9)	-8.5 (-9.1, -7.8)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

166. Perinatal conditions



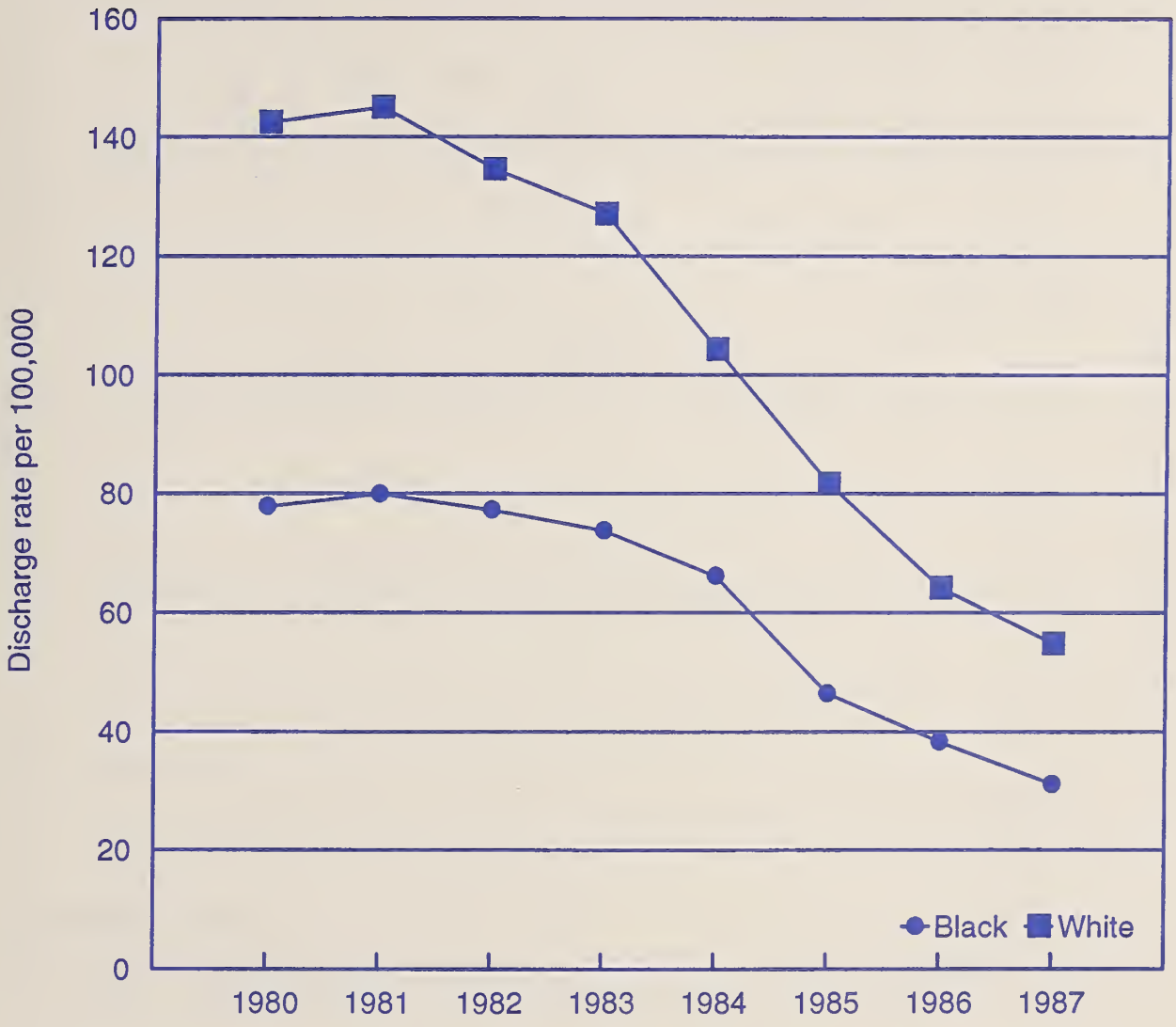
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	50.4 (34.5, 66.3)	42.9 (32.3, 53.6)	44.2 (29.6, 58.7)	41.0 (32.1, 49.8)	44.3 (34.1, 54.5)	44.4 (32.7, 56.2)	49.3 (36.0, 62.7)	51.6 (37.8, 65.5)	1.1 (-1.4, 3.8)
White	41.3 (34.6, 48.0)	41.0 (34.5, 47.4)	42.9 (36.5, 49.4)	45.4 (38.3, 52.5)	44.5 (37.8, 51.2)	52.7 (44.7, 60.8)	50.1 (42.5, 57.7)	50.5 (42.9, 58.2)	3.7 (2.3, 5.1)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

167. Joint disorders, trauma related



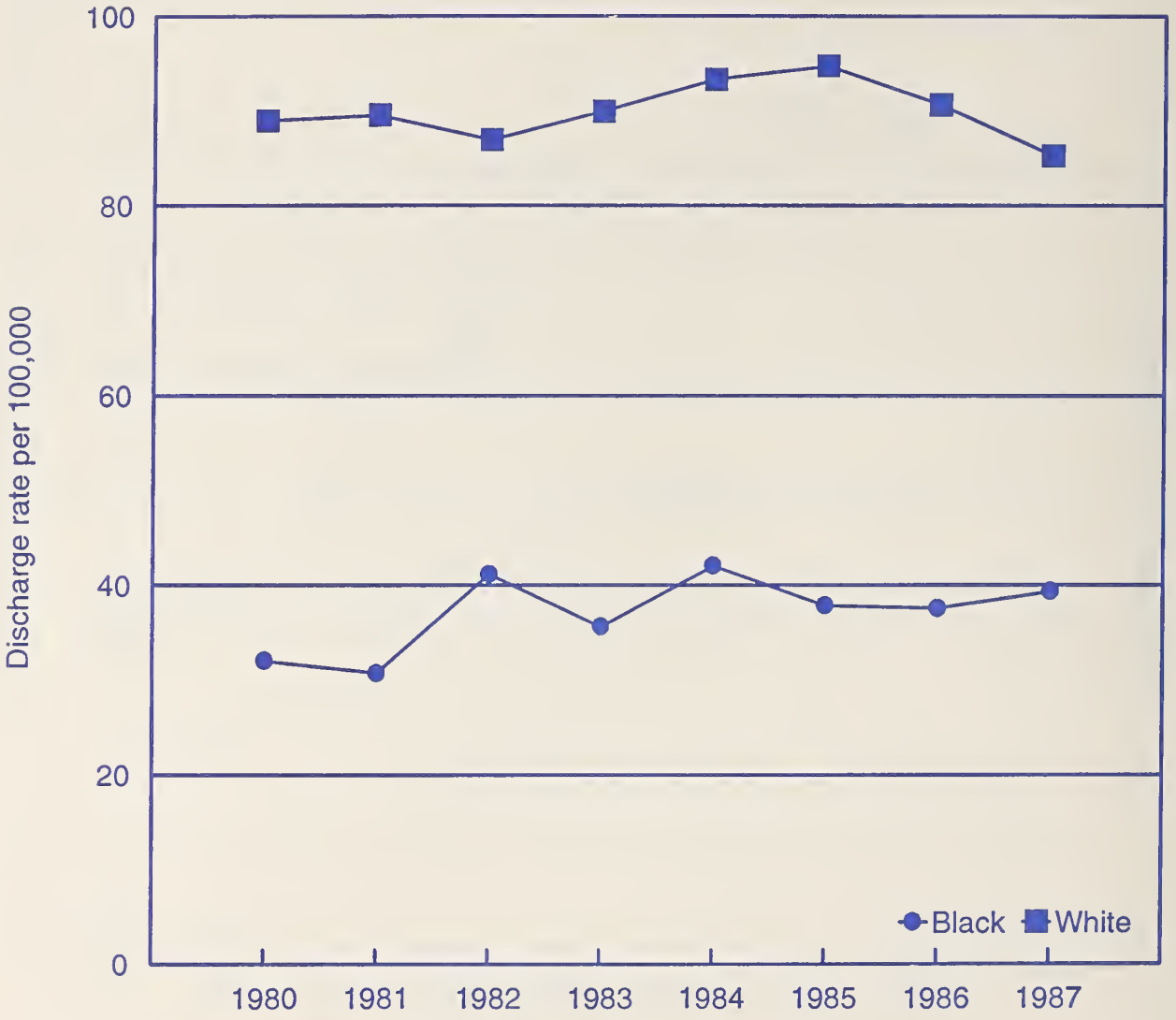
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	77.8 (65.3, 90.3)	79.9 (67.9, 92.0)	77.2 (66.8, 87.7)	73.7 (60.2, 87.1)	66.1 (53.1, 79.0)	46.4 (38.2, 54.7)	38.3 (30.9, 45.8)	31.1 (23.6, 38.5)	-13.0 (-16.9, -9.0)
White	142.5 (128.9, 156.1)	145.0 (133.0, 157.0)	134.6 (122.2, 147.0)	127.1 (115.2, 139.1)	104.3 (93.9, 114.7)	81.7 (71.4, 91.9)	64.2 (54.0, 74.4)	54.8 (45.4, 64.2)	-13.8 (-16.9, -10.6)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

168. Fracture of neck of femur (hip)



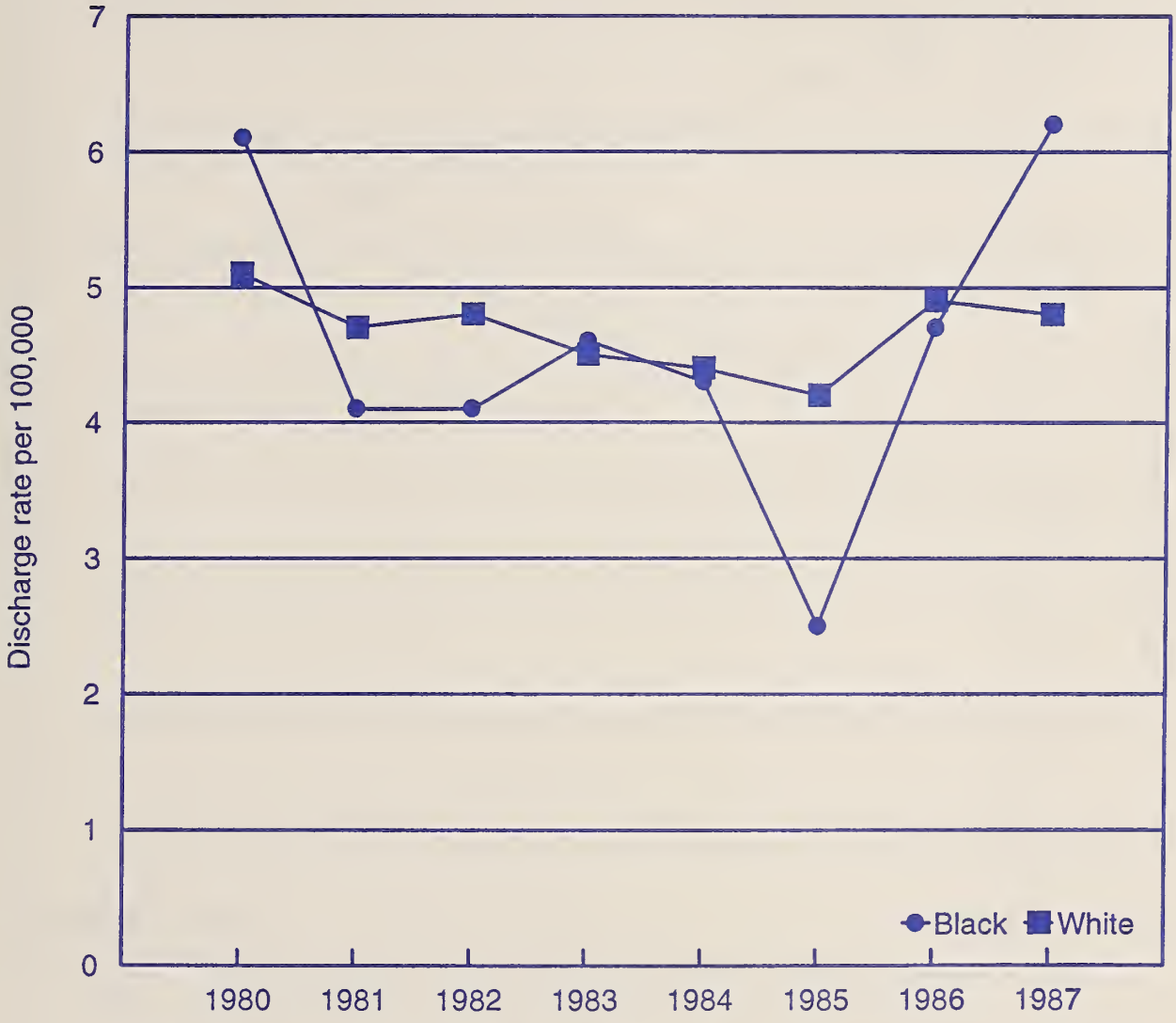
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	32.0 (24.9, 39.2)	30.7 (24.2, 37.2)	41.1 (33.5, 48.6)	35.6 (27.8, 43.4)	42.0 (34.3, 49.6)	37.8 (30.3, 45.3)	37.5 (30.0, 44.9)	39.3 (30.1, 48.6)	2.8 (–0.1, 5.9)
White	88.9 (82.3, 95.6)	89.5 (84.1, 94.8)	86.9 (81.6, 92.2)	89.9 (84.6, 95.2)	93.3 (87.5, 99.2)	94.7 (88.6, 100.8)	90.6 (84.6, 96.6)	85.2 (79.6, 90.7)	0.1 (–1.1, 1.2)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

169. Spinal cord injury, including fracture



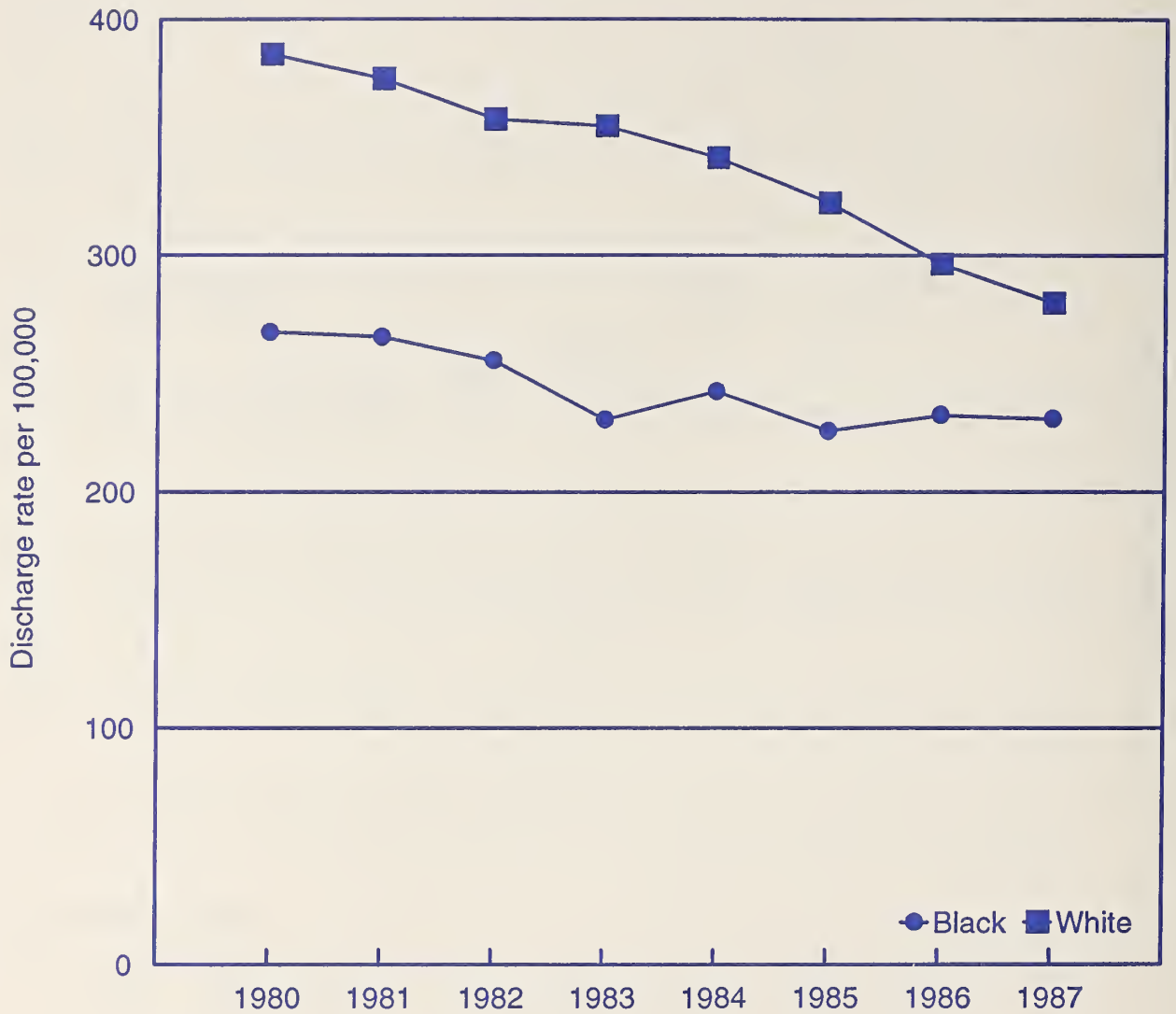
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	6.1 (4.0, 8.3)	4.1 (2.3, 5.8)	4.1 (2.4, 5.8)	4.6 (2.7, 6.4)	4.3 (2.7, 6.0)	2.5 (1.2, 3.7)	4.7 (2.9, 6.5)	6.2 (3.4, 8.9)	-0.9 (-9.7, 8.7)
White	5.1 (4.2, 6.1)	4.7 (3.7, 5.6)	4.8 (4.1, 5.6)	4.5 (3.8, 5.3)	4.4 (3.2, 5.7)	4.2 (3.3, 5.1)	4.9 (3.9, 5.8)	4.8 (3.7, 5.8)	-0.9 (-2.7, 1.0)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

170. Other fractures, not hip



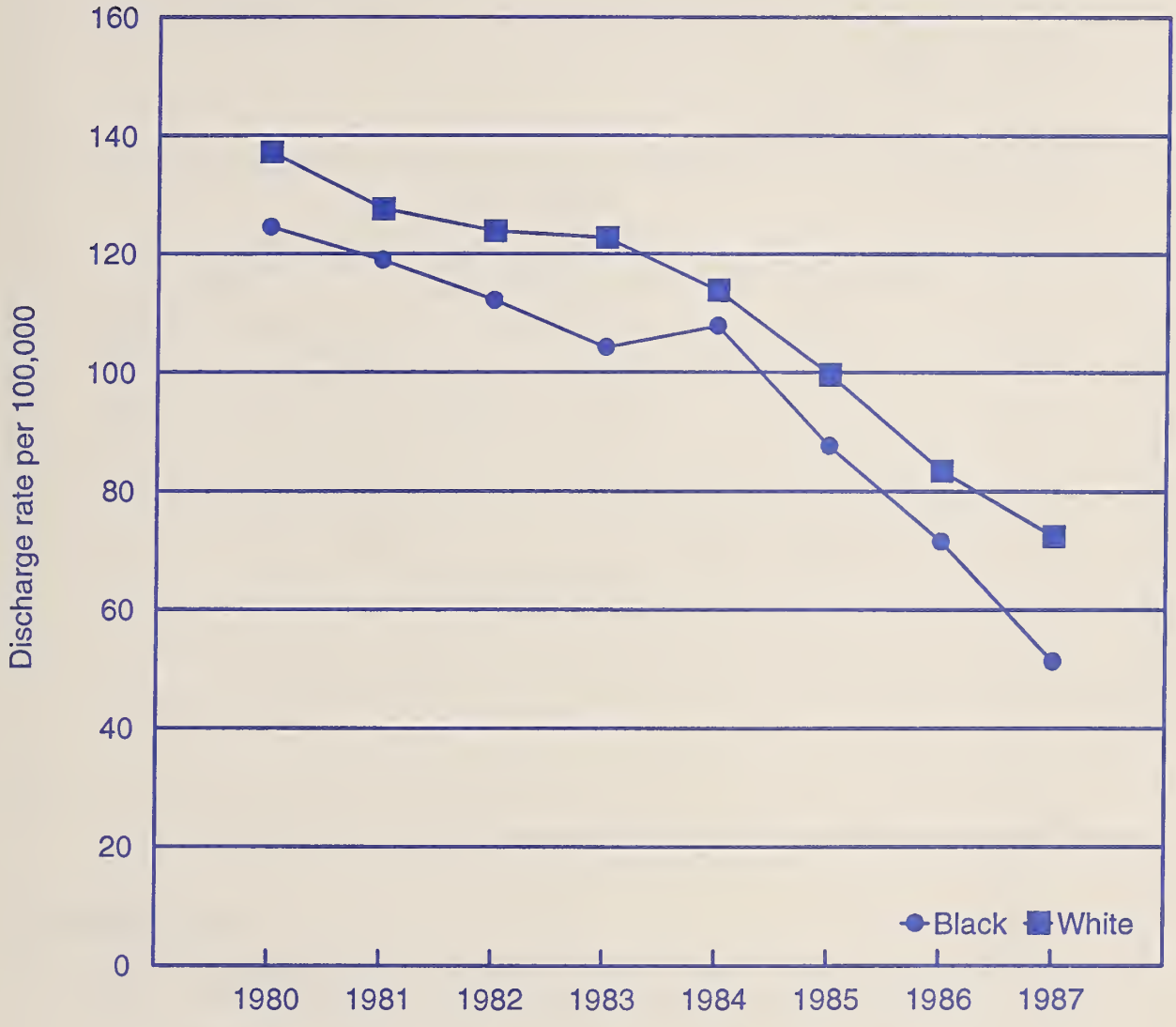
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	267.1 (218.2, 316.0)	265.1 (219.0, 311.2)	255.2 (212.5, 298.0)	230.4 (193.1, 267.7)	242.2 (204.5, 279.9)	225.6 (187.3, 263.9)	232.3 (182.9, 281.7)	230.7 (184.5, 277.0)	-2.4 (-3.4, -1.3)
White	385.1 (360.8, 409.4)	374.6 (352.7, 396.6)	357.5 (337.6, 377.3)	354.6 (335.4, 373.7)	341.2 (322.2, 360.2)	322.1 (302.2, 342.1)	296.1 (277.6, 314.6)	279.5 (263.2, 295.9)	-4.4 (-5.2, -3.6)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

171. Sprains and strains



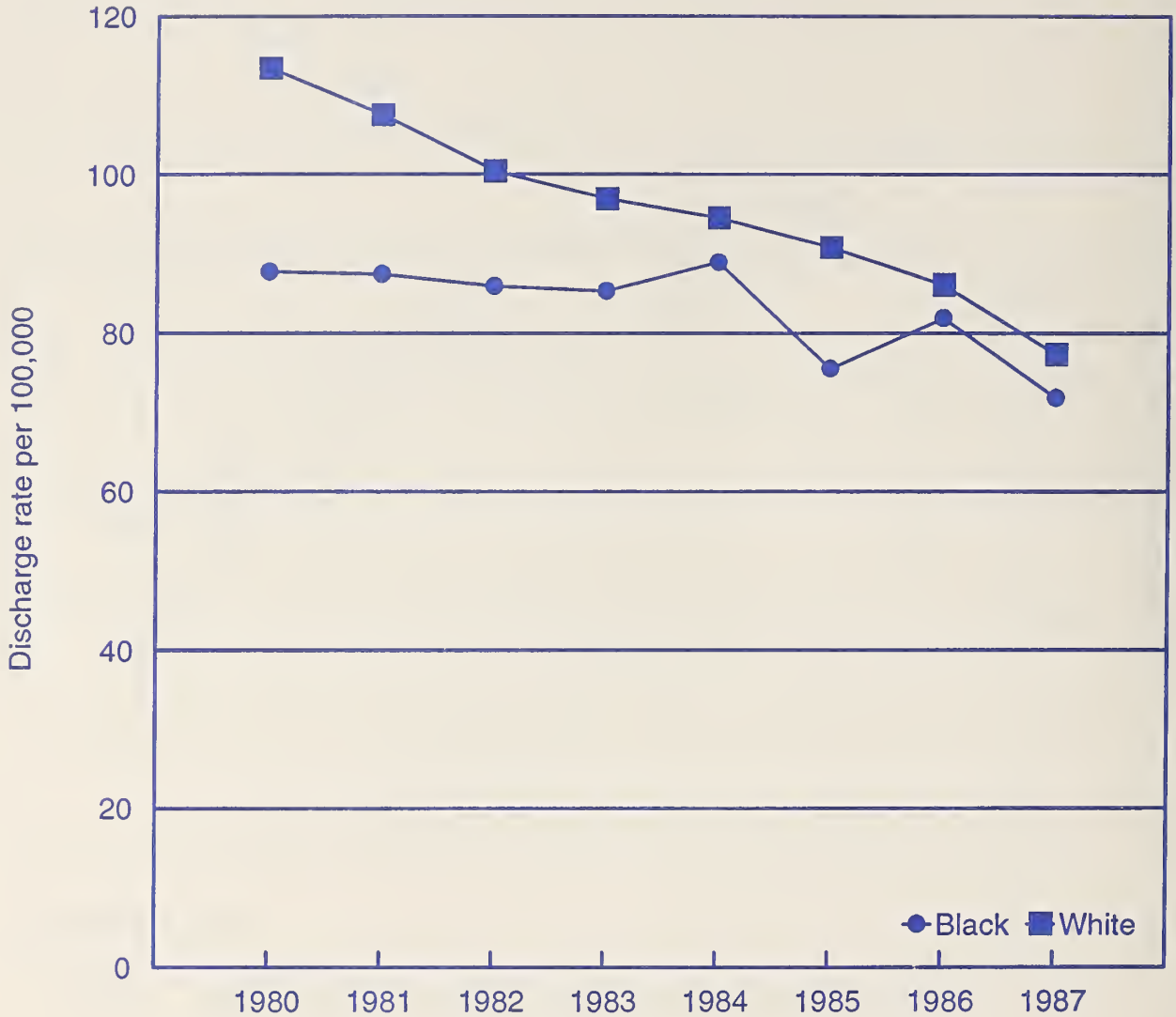
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	124.5 (103.6, 145.5)	118.9 (91.6, 146.2)	112.1 (87.6, 136.5)	104.2 (85.4, 123.0)	107.8 (84.8, 130.9)	87.6 (69.9, 105.2)	71.5 (59.2, 83.8)	51.3 (40.8, 61.7)	-10.7 (-14.2, -6.9)
White	137.2 (125.1, 149.3)	127.6 (117.2, 138.1)	123.8 (115.0, 132.7)	122.7 (114.0, 131.3)	113.8 (105.3, 122.3)	99.6 (91.6, 107.7)	83.4 (75.4, 91.4)	72.4 (64.1, 80.7)	-8.4 (-10.5, -6.2)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

172. Intracranial injury (not fracture)



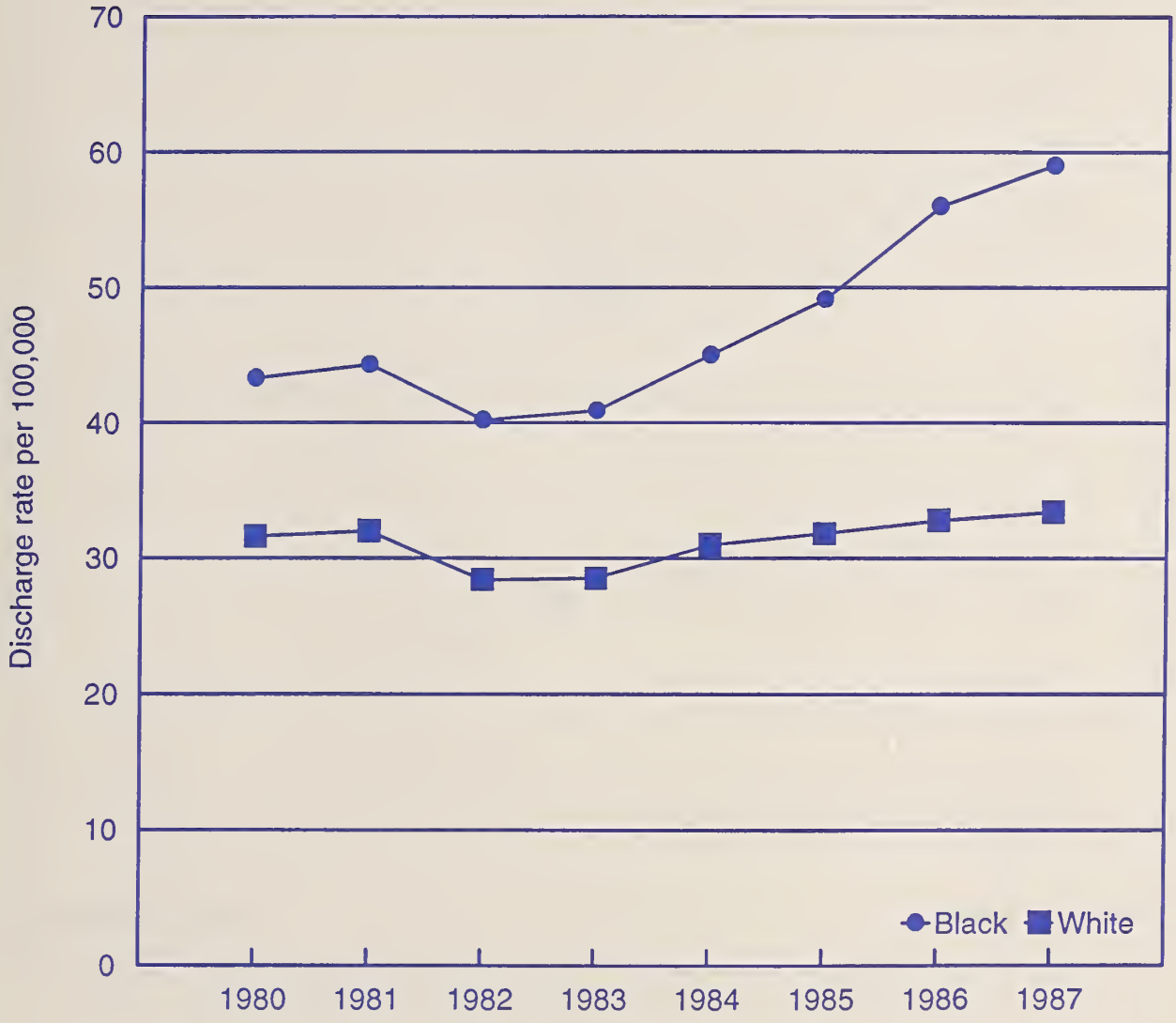
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	87.7 (66.0, 109.5)	87.4 (59.0, 115.9)	85.9 (60.0, 111.9)	85.3 (64.2, 106.5)	88.9 (68.3, 109.5)	75.5 (56.3, 94.8)	81.9 (63.9, 99.9)	71.8 (53.6, 90.0)	-2.4 (-4.0, -0.9)
White	113.4 (104.9, 121.9)	107.5 (99.4, 115.5)	100.4 (93.0, 107.8)	96.9 (89.3, 104.6)	94.5 (87.2, 101.8)	90.8 (82.9, 98.7)	86.1 (78.2, 94.1)	77.3 (69.9, 84.7)	-4.8 (-5.5, -4.1)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

173. Internal injury to viscera or vessels, crushing injury



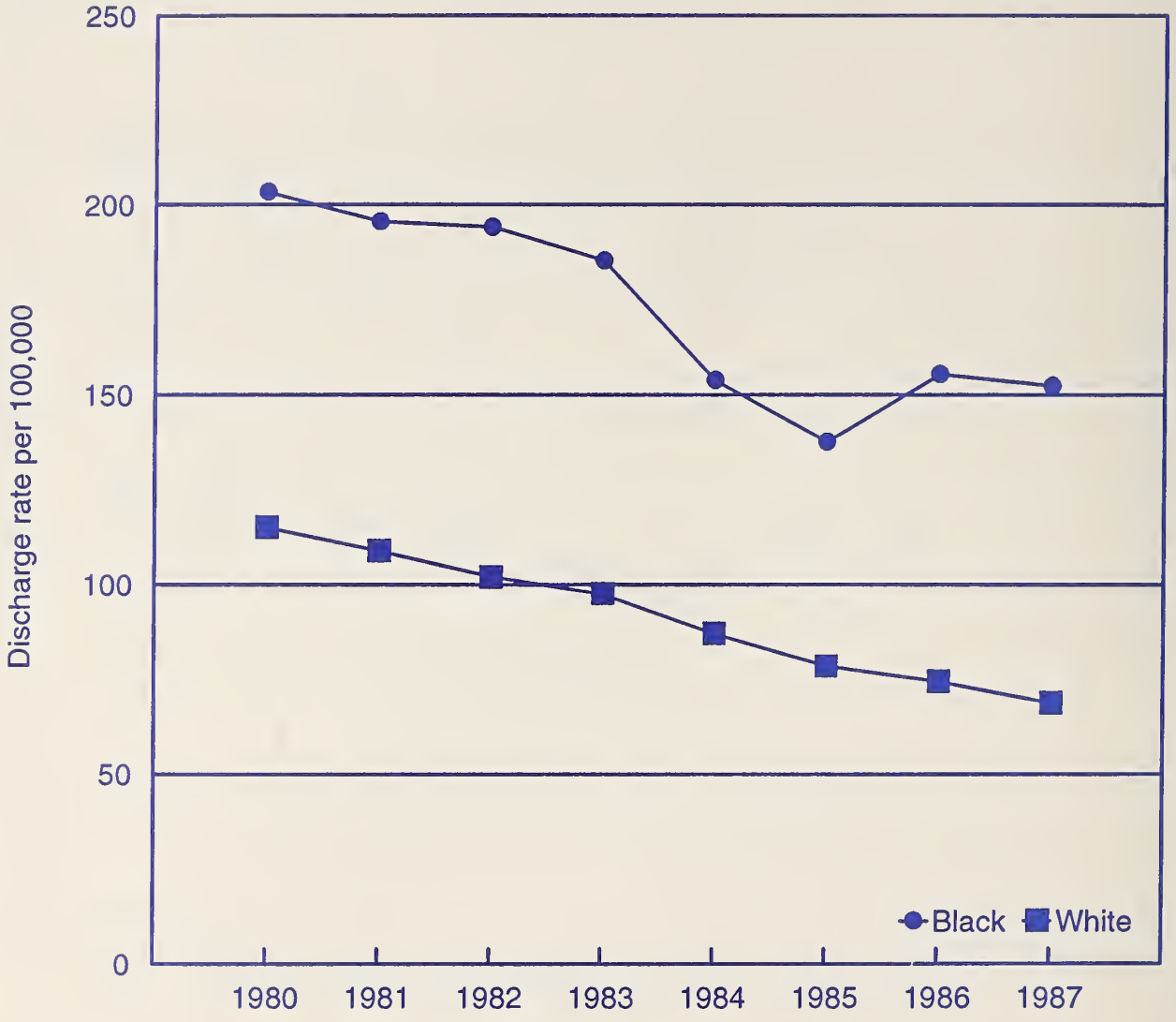
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	43.3 (31.5, 55.0)	44.3 (33.8, 54.8)	40.2 (30.1, 50.3)	40.9 (29.5, 52.4)	45.0 (34.3, 55.7)	49.1 (37.2, 60.9)	56.0 (40.6, 71.4)	59.0 (41.5, 76.4)	4.9 (2.3, 7.6)
White	31.6 (28.9, 34.3)	32.0 (29.3, 34.8)	28.4 (26.0, 30.8)	28.5 (26.2, 30.8)	31.0 (28.2, 33.8)	31.8 (29.0, 34.6)	32.8 (29.9, 35.8)	33.4 (30.1, 36.7)	1.1 (–0.6, 2.9)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

174. Open wounds



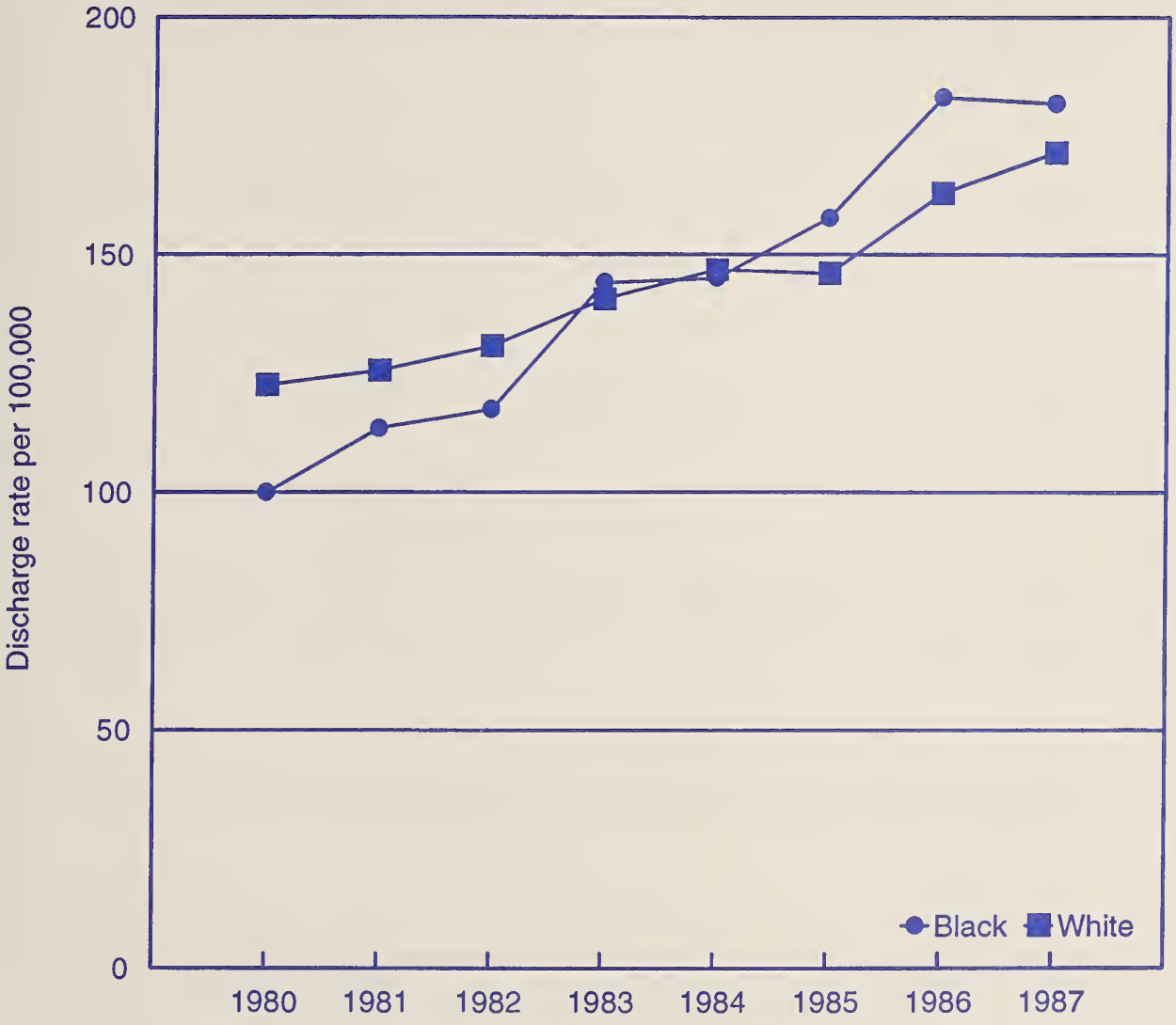
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	203.3 (153.3, 253.3)	195.5 (153.3, 237.7)	194.0 (153.4, 234.6)	185.2 (148.0, 222.3)	153.8 (123.0, 184.7)	137.6 (108.5, 166.7)	155.4 (113.0, 197.8)	152.3 (104.0, 200.6)	-5.1 (-7.3, -2.8)
White	114.9 (107.6, 122.1)	108.8 (101.2, 116.4)	101.9 (94.9, 108.9)	97.5 (90.5, 104.4)	87.0 (80.7, 93.2)	78.5 (72.5, 84.6)	74.5 (68.8, 80.2)	68.8 (62.1, 75.4)	-7.3 (-7.9, -6.7)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

175. Complication of device or procedure



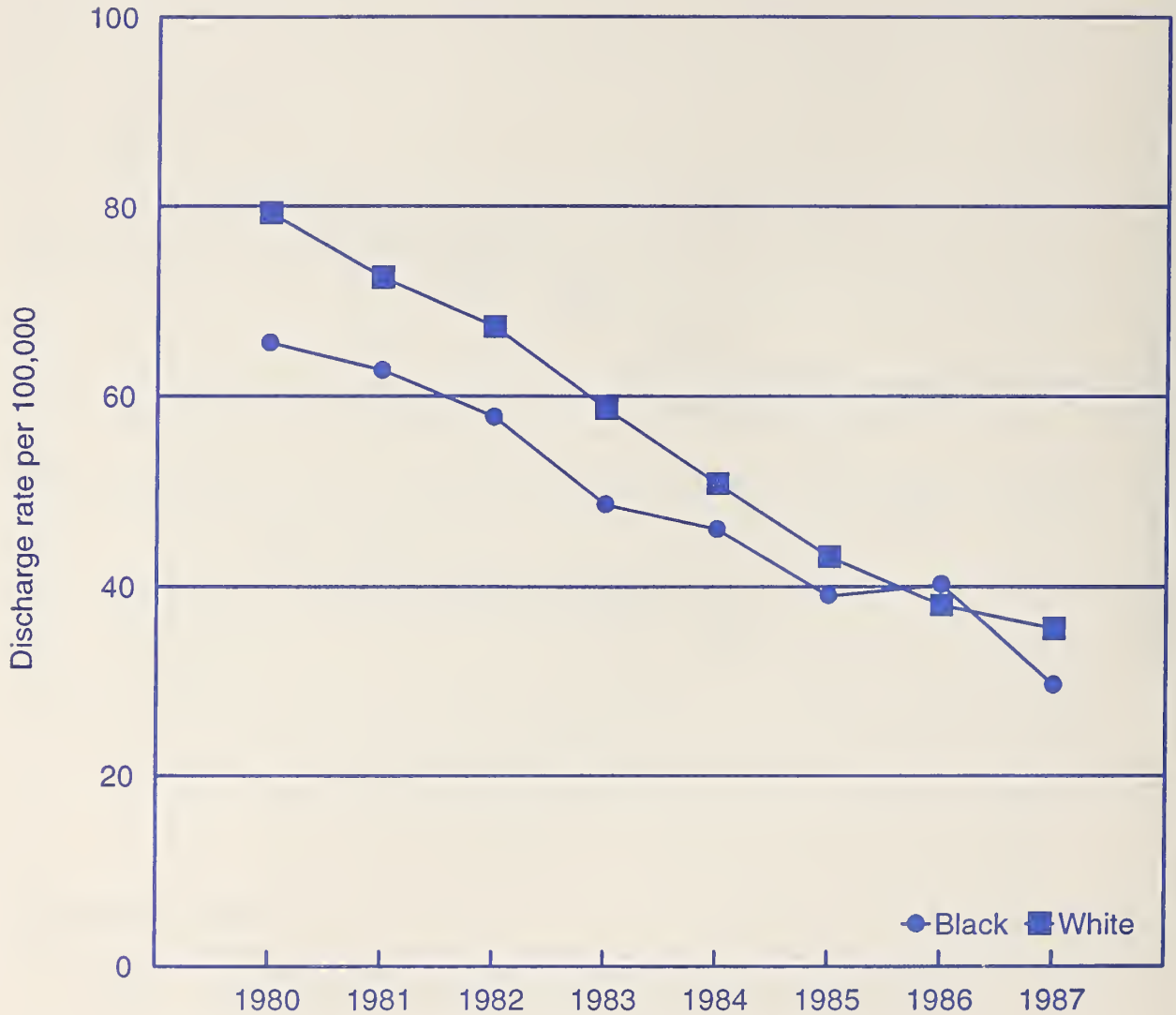
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	99.9 (81.0, 118.7)	113.4 (94.2, 132.7)	117.4 (95.8, 139.0)	144.0 (119.5, 168.5)	145.0 (119.0, 171.0)	157.6 (126.6, 188.5)	183.0 (142.3, 223.7)	181.7 (146.1, 217.3)	9.3 (7.8, 10.8)
White	122.5 (112.8, 132.3)	125.5 (116.1, 135.0)	130.7 (121.1, 140.4)	140.5 (130.7, 150.3)	146.7 (136.2, 157.2)	146.0 (134.6, 157.5)	162.8 (150.3, 175.4)	171.4 (157.6, 185.2)	4.9 (4.2, 5.7)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

176. Superficial injury, contusion



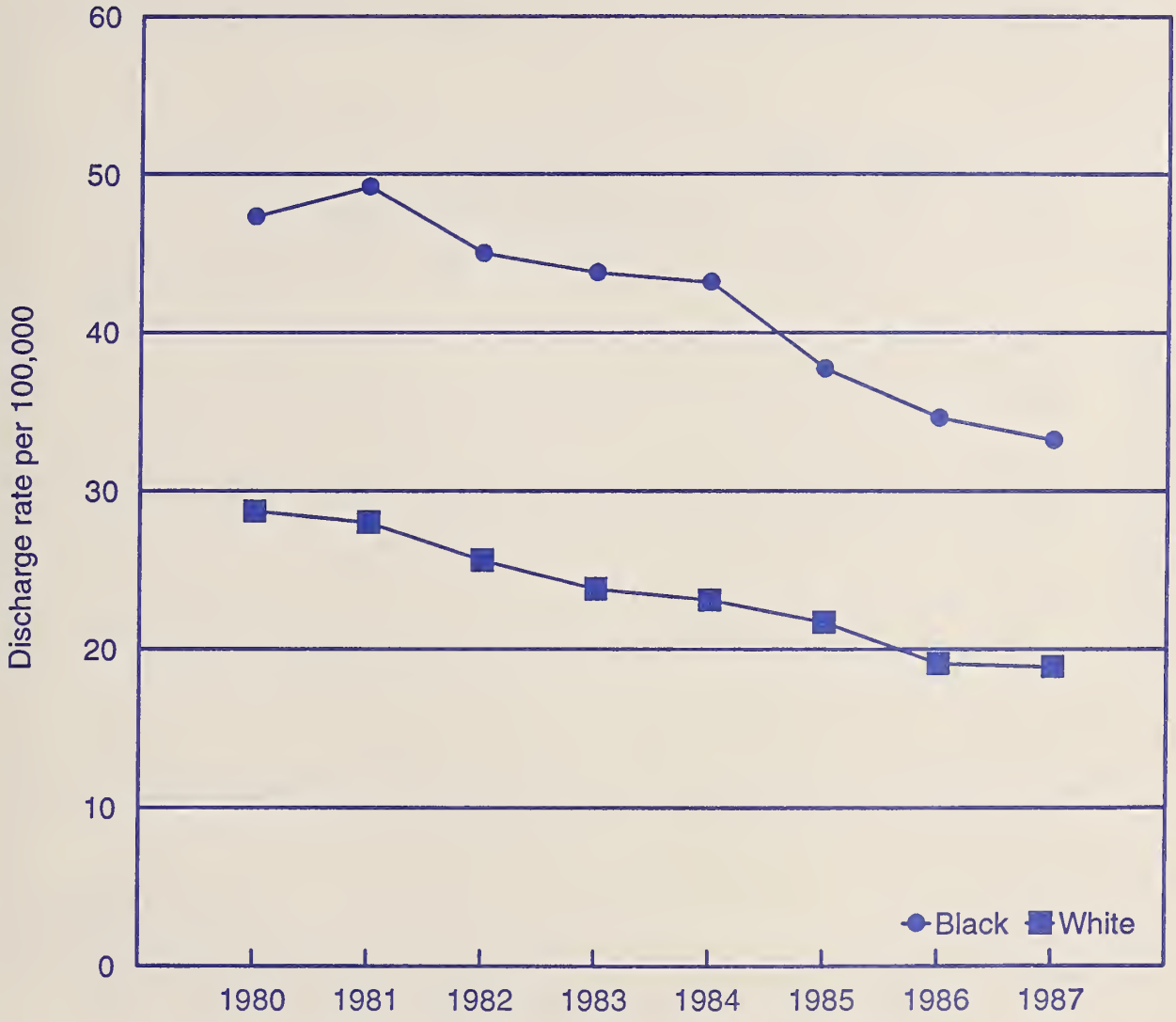
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	65.6 (50.3, 80.9)	62.7 (45.4, 79.9)	57.8 (41.8, 73.8)	48.6 (38.5, 58.7)	46.0 (37.0, 55.0)	39.0 (30.4, 47.5)	40.2 (30.9, 49.4)	29.6 (23.2, 36.0)	-10.2 (-12.0, -8.4)
White	79.3 (74.0, 84.5)	72.5 (67.1, 77.8)	67.3 (62.9, 71.6)	58.7 (55.2, 62.2)	50.8 (47.3, 54.3)	43.1 (39.9, 46.4)	38.0 (34.9, 41.0)	35.5 (32.1, 39.0)	-11.6 (-12.5, -10.6)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

177. Burns



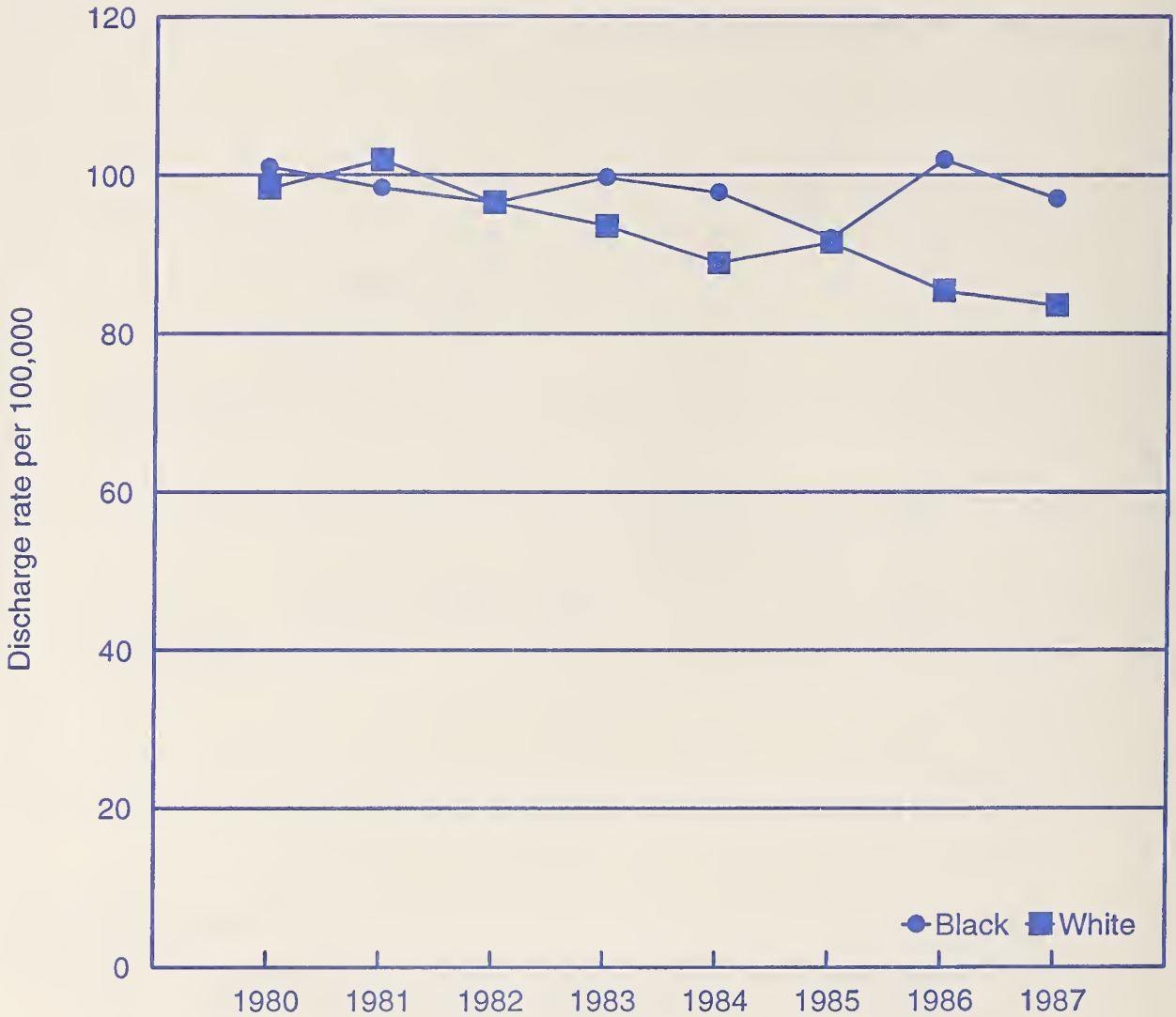
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	47.3 (33.8, 60.8)	49.2 (36.0, 62.4)	45.0 (34.0, 56.0)	43.8 (33.9, 53.6)	43.2 (32.5, 54.0)	37.7 (28.8, 46.7)	34.6 (25.9, 43.3)	33.2 (23.1, 43.3)	-5.5 (-6.8, -4.2)
White	28.7 (25.6, 31.8)	28.0 (24.3, 31.7)	25.6 (22.6, 28.5)	23.8 (21.0, 26.5)	23.1 (20.4, 25.8)	21.7 (18.7, 24.8)	19.1 (16.1, 22.1)	18.9 (15.2, 22.7)	-6.2 (-6.9, -5.4)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

178. Poisoning



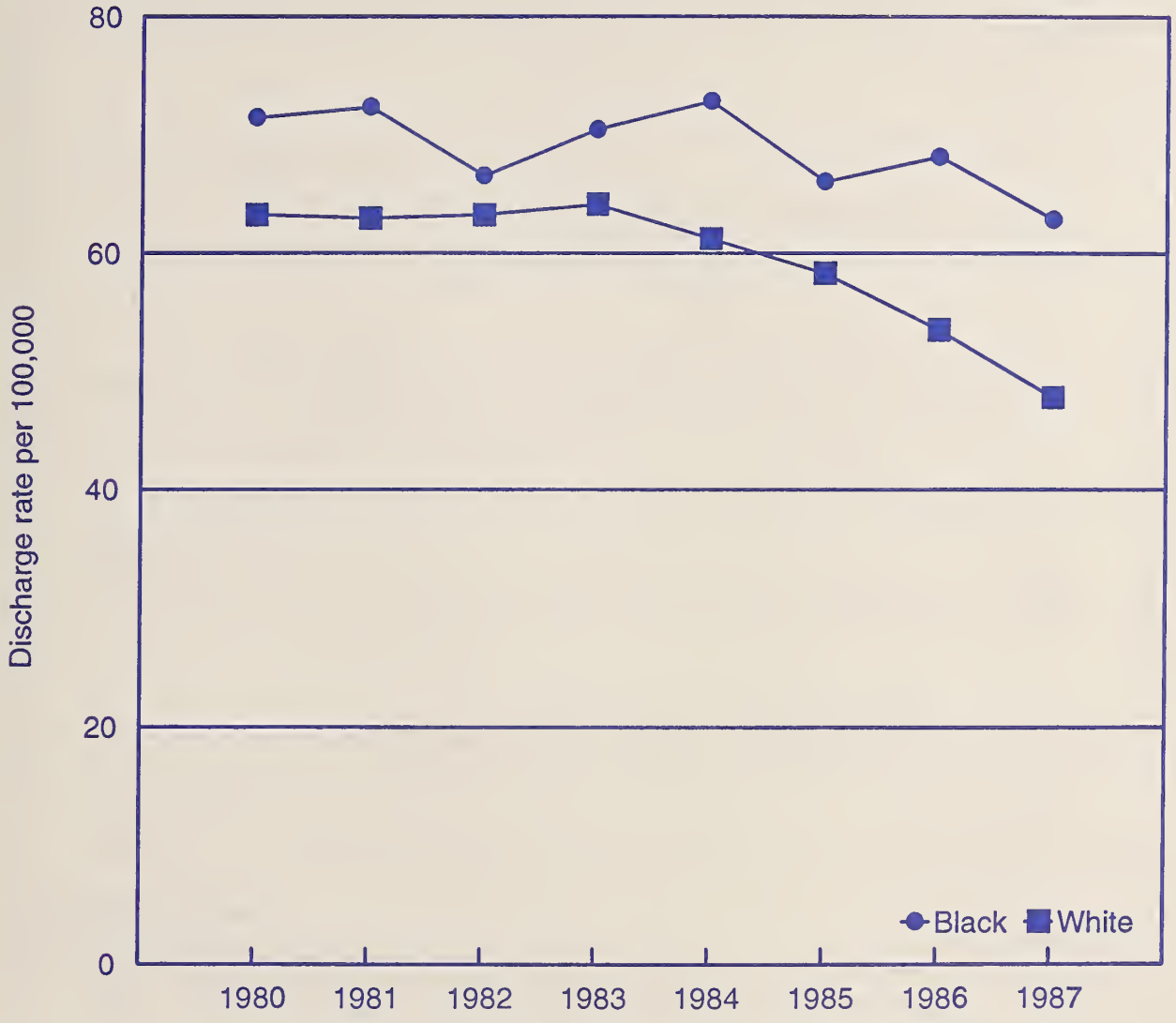
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	101.0 (76.4, 125.7)	98.4 (76.8, 119.9)	96.5 (74.2, 118.8)	99.7 (77.8, 121.7)	97.8 (77.8, 117.7)	92.0 (74.5, 109.6)	101.9 (81.6, 122.2)	97.0 (77.4, 116.6)	-0.3 (-1.3, 0.7)
White	98.3 (91.5, 105.1)	101.9 (92.9, 110.9)	96.5 (88.9, 104.2)	93.6 (86.4, 100.9)	88.9 (83.2, 94.5)	91.5 (85.1, 98.0)	85.4 (79.9, 90.9)	83.6 (77.9, 89.3)	-2.6 (-3.3, -1.9)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

179. Other external injury



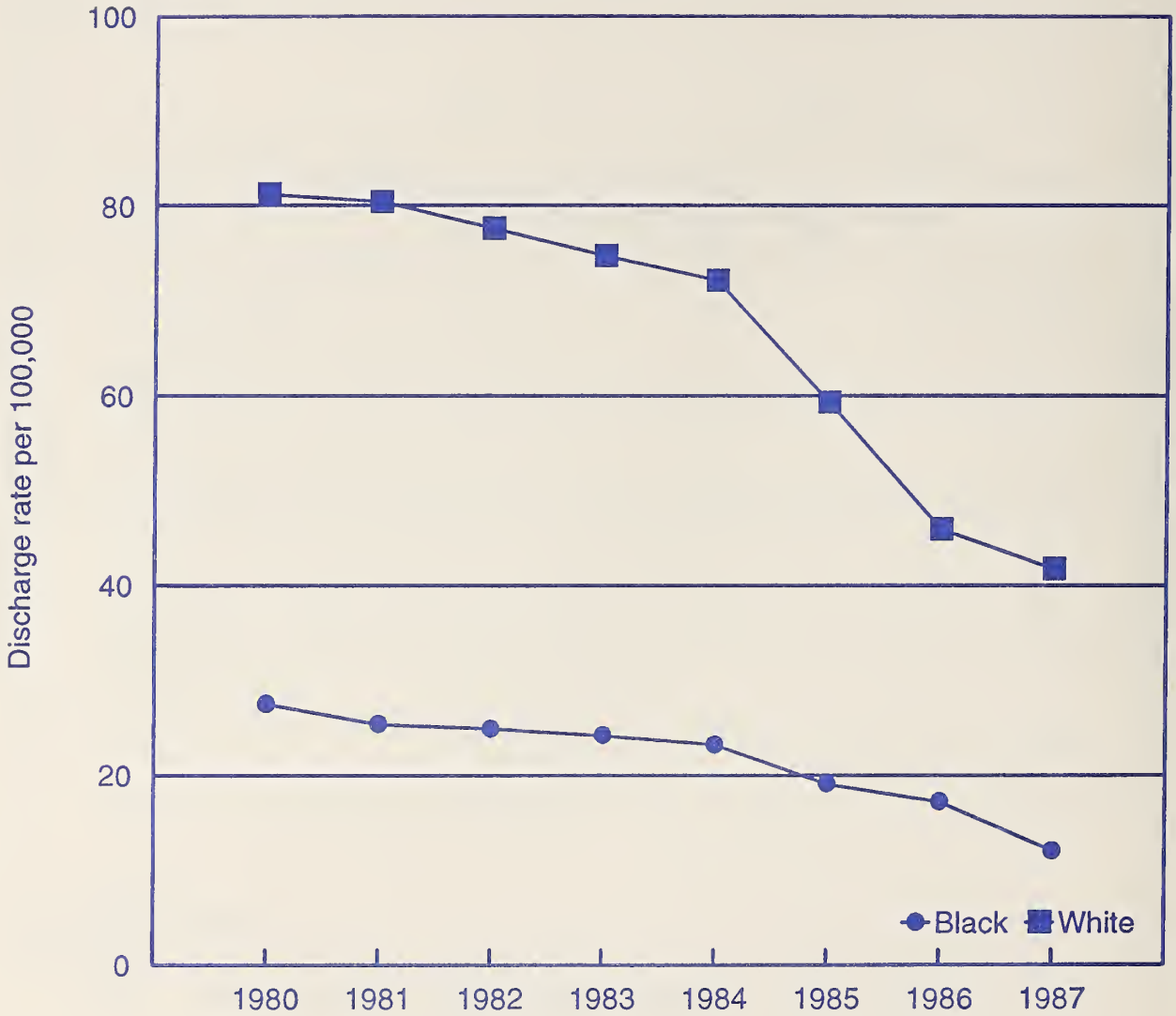
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	71.4 (59.7, 83.1)	72.3 (60.0, 84.7)	66.5 (53.4, 79.7)	70.4 (58.5, 82.3)	72.8 (60.0, 85.7)	66.0 (53.7, 78.3)	68.1 (55.0, 81.2)	62.8 (48.9, 76.7)	-1.4 (-2.6, -0.2)
White	63.2 (58.7, 67.7)	62.9 (58.1, 67.6)	63.2 (59.1, 67.2)	64.1 (59.8, 68.4)	61.2 (56.8, 65.7)	58.3 (54.1, 62.6)	53.5 (49.4, 57.6)	47.8 (43.7, 52.0)	-3.6 (-5.2, -1.8)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

180. Indications for plastic surgery



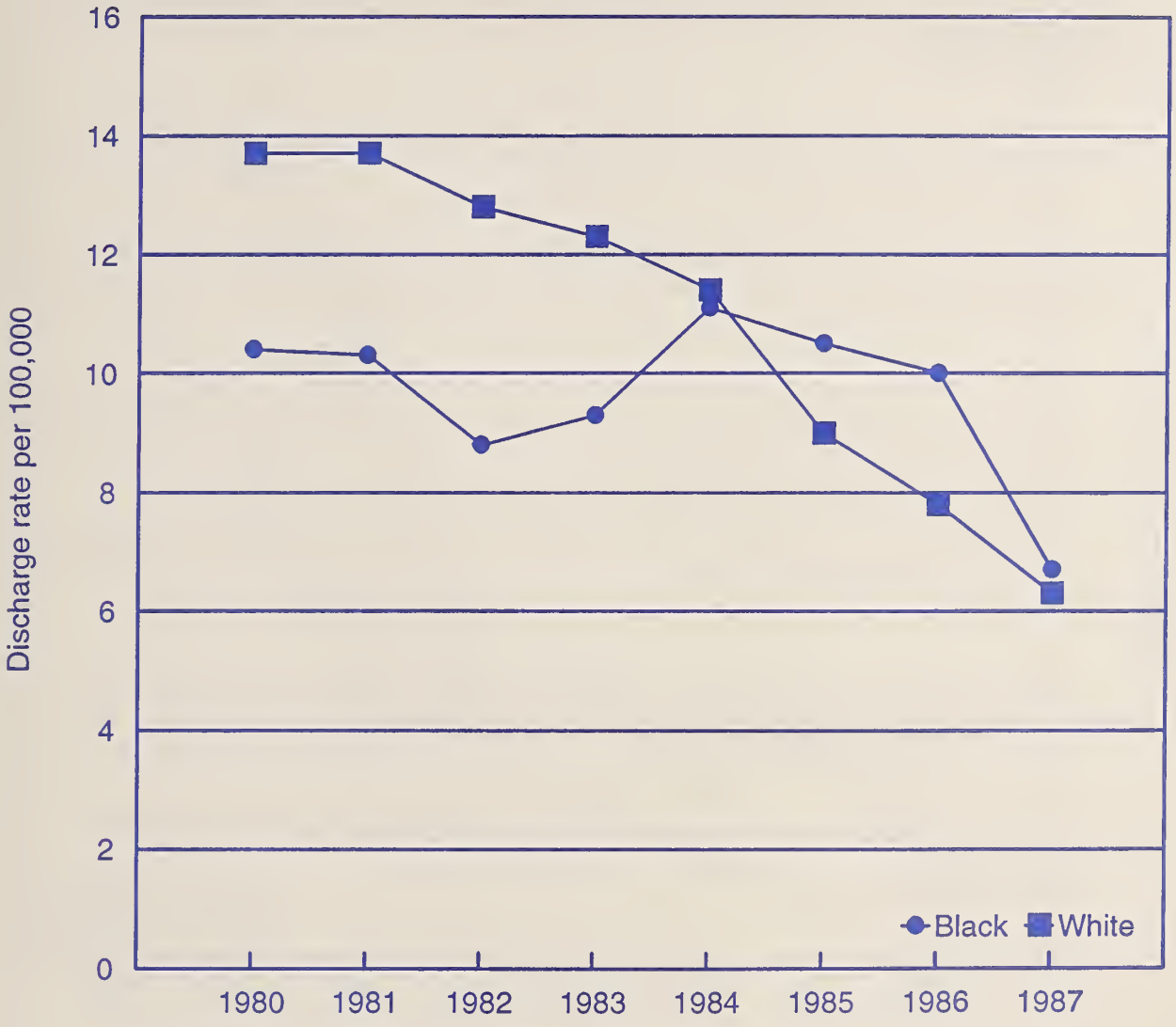
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	27.5 (20.8, 34.3)	25.4 (18.1, 32.7)	24.9 (16.8, 33.0)	24.2 (18.3, 30.0)	23.2 (17.5, 29.0)	19.1 (14.7, 23.5)	17.2 (12.7, 21.6)	12.0 (9.1, 14.9)	-9.8 (-13.0, -6.4)
White	81.2 (69.6, 92.8)	80.4 (70.1, 90.7)	77.6 (67.2, 87.9)	74.7 (65.7, 83.8)	72.1 (63.0, 81.3)	59.3 (52.4, 66.2)	45.9 (39.6, 52.2)	41.7 (34.5, 48.9)	-9.4 (-12.4, -6.4)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

181. Allergic reactions



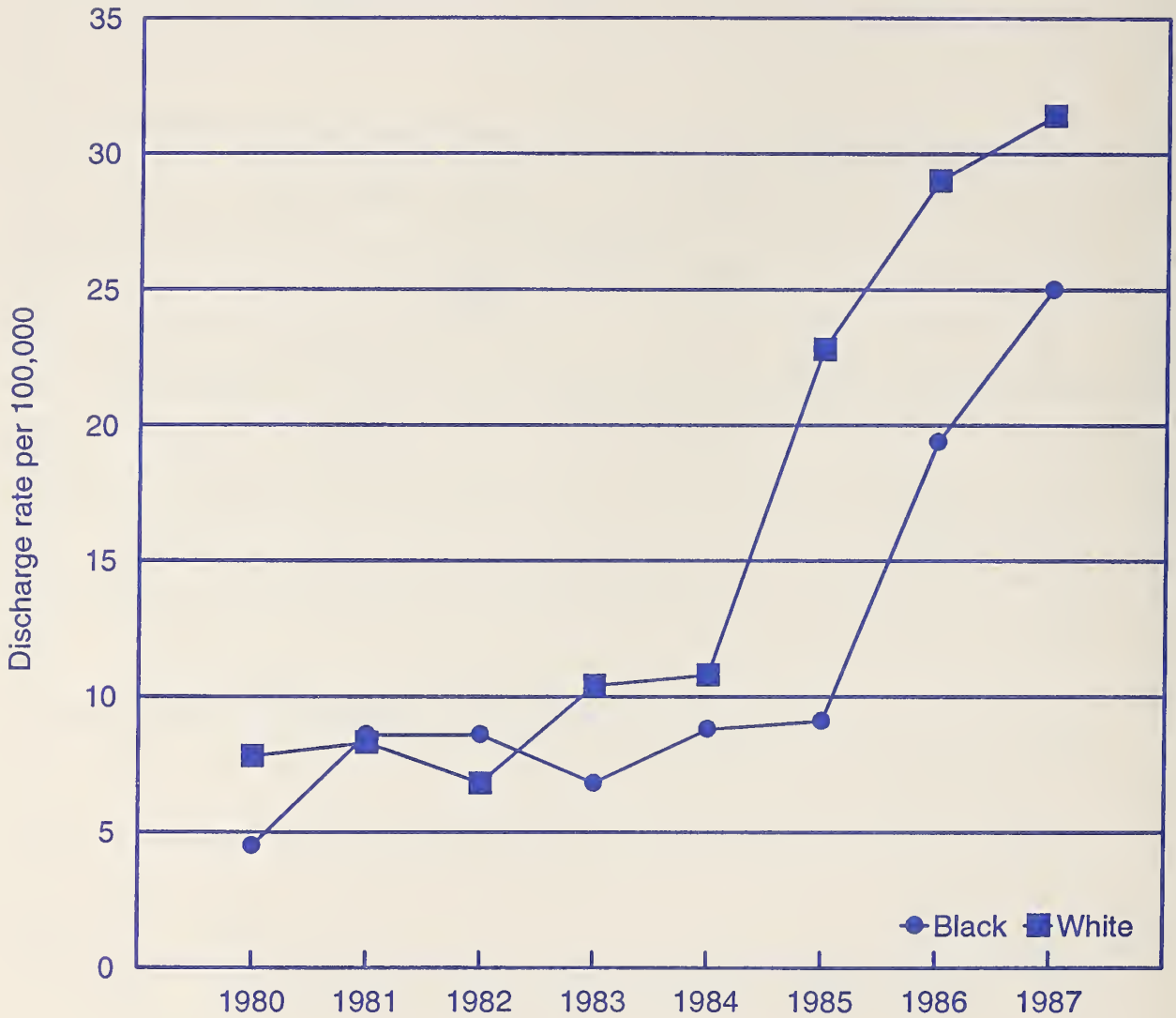
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	10.4 (6.9, 14.0)	10.3 (7.3, 13.3)	8.8 (6.2, 11.4)	9.3 (6.6, 12.0)	11.1 (7.9, 14.2)	10.5 (7.5, 13.5)	10.0 (6.6, 13.3)	6.7 (4.2, 9.3)	–3.0 (–7.4, 1.6)
White	13.7 (12.2, 15.3)	13.7 (12.2, 15.2)	12.8 (11.4, 14.2)	12.3 (10.9, 13.6)	11.4 (10.1, 12.7)	9.0 (7.8, 10.1)	7.8 (6.8, 8.9)	6.3 (5.4, 7.2)	–10.5 (–13.2, –7.8)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

182. Rehabilitation care and fitting of prostheses



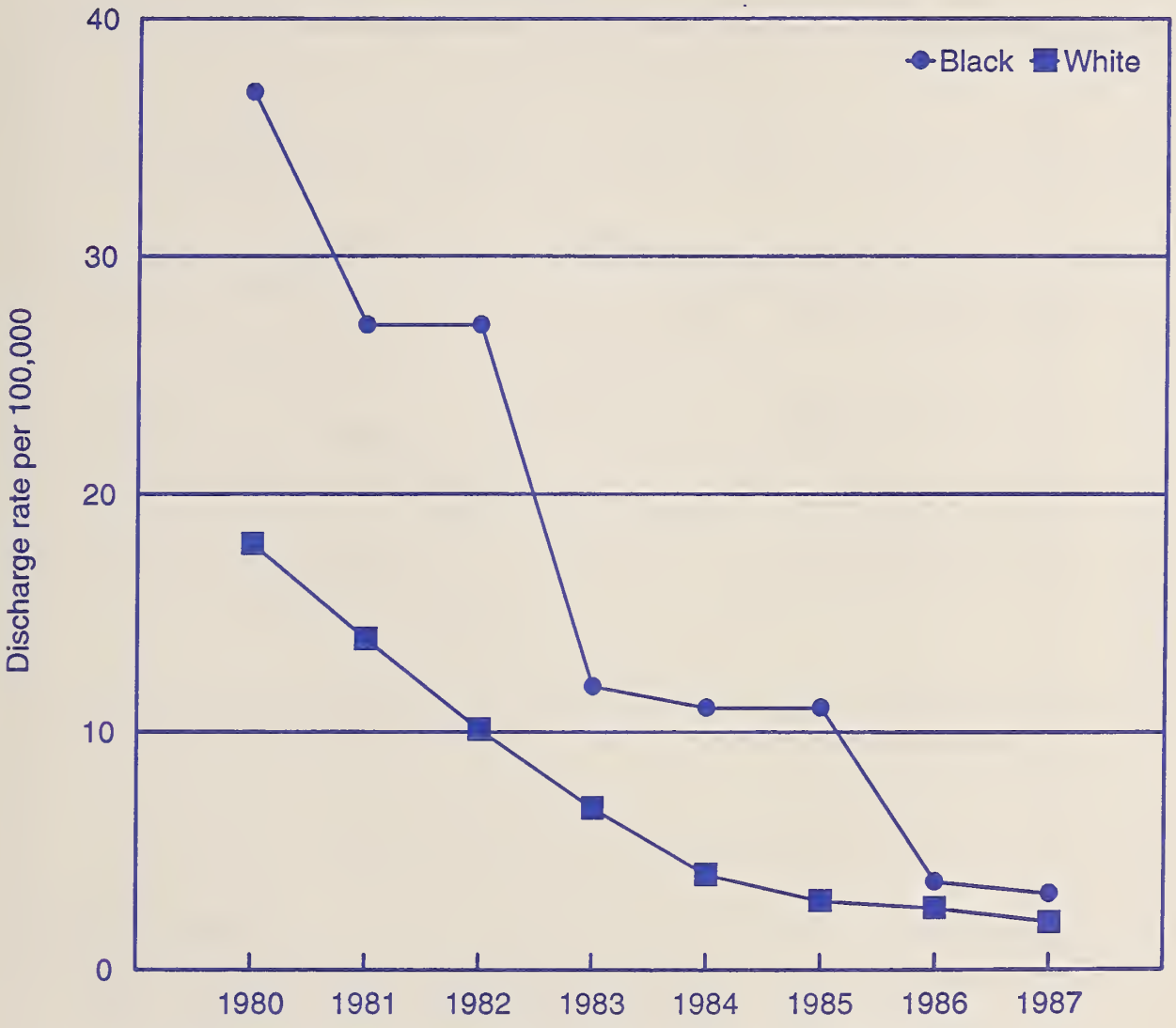
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	4.5 (2.8, 6.2)	8.6 (5.6, 11.5)	8.6 (4.7, 12.6)	6.8 (3.6, 10.1)	8.8 (5.0, 12.6)	9.1 (5.1, 13.1)	19.4 (11.2, 27.6)	25.0 (14.8, 35.2)	21.7 (11.5, 32.9)
White	7.8 (5.9, 9.7)	8.3 (6.2, 10.4)	6.8 (5.0, 8.6)	10.4 (7.2, 13.7)	10.8 (7.5, 14.0)	22.8 (15.5, 30.0)	29.0 (21.2, 36.8)	31.4 (23.2, 39.6)	26.4 (16.9, 36.6)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

183. Administrative/social admission



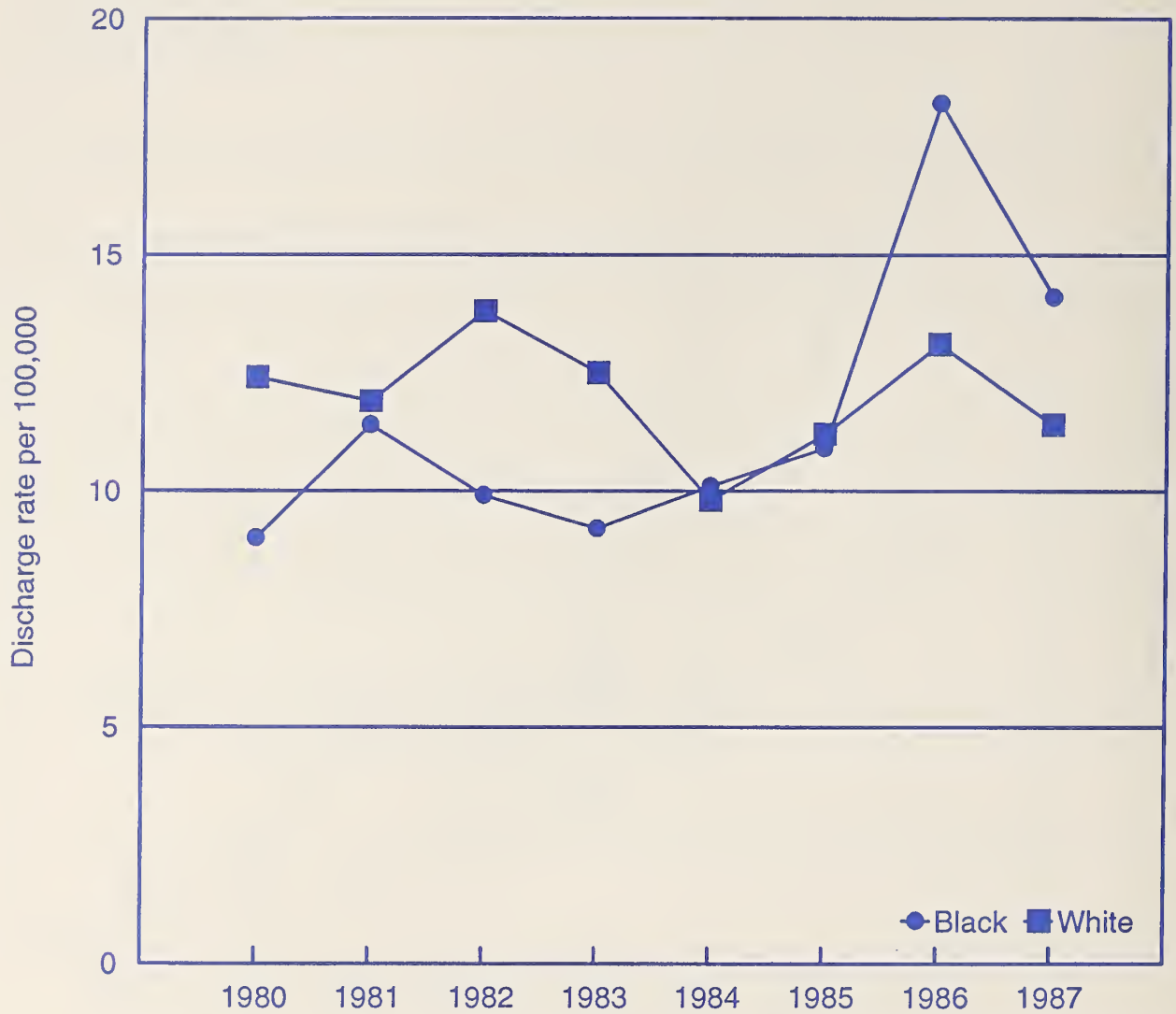
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	36.9 (22.4, 51.4)	27.1 (17.6, 36.7)	27.1 (11.1, 43.0)	11.9 (7.4, 16.3)	11.0 (5.9, 16.0)	11.0 (5.8, 16.2)	3.7 (1.9, 5.4)	3.2 (1.6, 4.8)	-29.9 (-35.4, -24.0)
White	17.9 (12.3, 23.5)	13.9 (9.6, 18.2)	10.1 (7.4, 12.8)	6.8 (5.5, 8.0)	4.0 (2.8, 5.1)	2.9 (2.1, 3.7)	2.6 (1.9, 3.3)	2.0 (1.2, 2.9)	-28.1 (-30.9, -25.3)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

184. Medical examination, evaluation



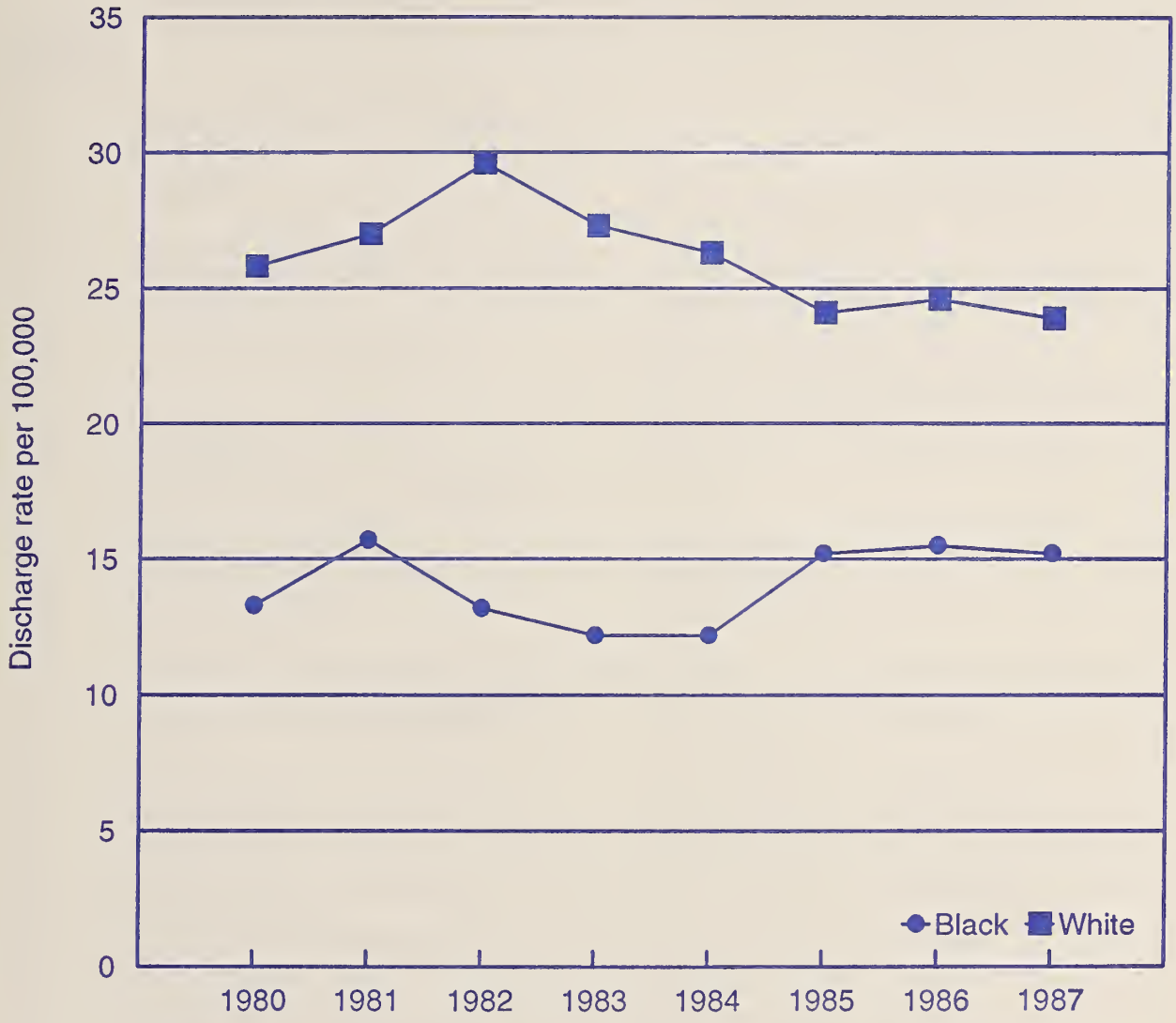
Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	9.0 (5.9, 12.2)	11.4 (8.1, 14.7)	9.9 (6.8, 13.0)	9.2 (4.8, 13.7)	10.1 (5.3, 14.8)	10.9 (4.8, 17.0)	18.2 (7.5, 29.0)	14.1 (6.2, 22.1)	7.2 (1.5, 13.3)
White	12.4 (10.3, 14.5)	11.9 (9.8, 13.9)	13.8 (10.9, 16.7)	12.5 (9.6, 15.4)	9.8 (7.2, 12.4)	11.2 (8.6, 13.9)	13.1 (9.5, 16.7)	11.4 (7.9, 14.8)	–1.1 (–4.4, 2.2)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

185. Other aftercare



Discharge rate per 100,000, estimated annual percent change (EAPC), and confidence interval in parentheses

Race	1980	1981	1982	1983	1984	1985	1986	1987	EAPC
Black	13.3 (9.4, 17.2)	15.7 (11.4, 20.0)	13.2 (9.6, 16.8)	12.2 (8.4, 16.1)	12.2 (9.0, 15.3)	15.2 (8.7, 21.7)	15.5 (10.1, 21.0)	15.2 (10.3, 20.1)	1.6 (–1.7, 4.9)
White	25.8 (21.2, 30.4)	27.0 (22.7, 31.2)	29.6 (23.2, 36.0)	27.3 (22.6, 32.0)	26.3 (20.4, 32.1)	24.1 (16.8, 31.5)	24.6 (18.3, 30.9)	23.9 (17.1, 30.7)	–1.9 (–3.6, –0.2)

Note: Based on 20 percent of discharges from the Hospital Cost and Utilization Project, 1980-87, weighted to obtain national estimates, and age- and sex-adjusted to the 1970 resident U.S. population.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

Appendix A
Summary diagnosis categories and ICD-9-CM codes

Category number	Diagnosis category	ICD-9-CM codes[1]
	Infectious and Parasitic Diseases	
1.	Tuberculosis	010-018, 137, 795.5, V01.1, V03.2, V71.2, V74.1
2.	Septicemia	038
3.	Other bacterial infections	020-037, 040-041, 790.7, V02.4-V02.5, V03.3-V03.9, V74.2-V74.4, V74.6, V74.8-V74.9
4.	Mycoses and actinomycoses	039, 110-118, V75.4
5.	HIV (human immunodeficiency virus) infection	042-044, 279.10, 279.19, 795.8
6.	Viral infections	050-079, 138, 139.1-139.8, 790.8, V01.2-V01.5, V01.7, V02.6, V04, V05.1, V73
7.	Other infections, including parasitic	080-088, 100-104, 120-134, 136, 795.3, V01.8-V01.9, V05.2, V06.1-V06.9, V07.0, V07.3-V07.9, V12.0, V75.0-V75.3, V75.5-V75.9
8.	Sexually transmitted infections (not HIV or hepatitis)	090-099, 795.6, V01.6, V02.7-V02.8, V74.5
9.	Fever of unknown origin	780.6
	Neoplasms and Carcinoma in Situ	
10.	Cancer of head and neck	140-149, 195.0
11.	Cancer of stomach and esophagus	150-151, V10.04
12.	Cancer of colon-rectum	153-154, V10.05, V10.06, V76.41
13.	Hepatobiliary cancer	155-156, V10.07
14.	Cancer of pancreas	157
15.	Cancer of other gastrointestinal organs, peritoneum	152, 158-159, V10.00-V10.03, V10.09, V76.42
16.	Cancer of bronchus, lung, trachea, larynx	161, 162
17.	Cancer, other respiratory and intrathoracic	160, 163, 165, V10.1, V10.2, V76.0
18.	Melanoma	172, V10.82
19.	Other cancer of skin (not melanoma)	173, V10.83, V76.43
20.	Cancer of breast	174-175, 793.8, V10.3, V52.4, V76.1
21.	Cancer of uterus	179, 182, V10.42
22.	Cancer of cervix	180, 795.0, V76.2, V10.41
23.	Cancer of ovary	183.0, V10.43
24.	Cancer of other female genital organs	181, 183.2-183.9, 184, V10.40, V10.44
25.	Cancer of prostate	185, V10.46
26.	Cancer of other male genital organs	186-187, V10.45, V10.47-V10.49
27.	Cancer of bladder	188, V10.51, V76.3
28.	Cancer of kidney	189.0-189.1, V10.52
29.	Cancer of other urinary organs	189.2-189.9, V10.50, V10.59
30.	Cancer of brain and nervous system	191-192, V10.85
31.	Cancer of thyroid	193, V10.87
32.	Hodgkin's disease	201, V10.72
33.	Non-Hodgkin's lymphoma	202, V10.79
34.	Lymphosarcoma and reticulosarcoma	200, V10.71
35.	Leukemia	203.1, 204-208, V10.6
36.	Multiple myeloma	203.0
37.	Cancer, other primary	164, 170-171, 190, 194, 195.1-195.9, 203.8, 795.1, V10.81, V10.84, V10.86, V10.88-V10.99, V76.49, V76.8-V76.9
38.	Secondary malignancies	196-198
39.	Neoplasms of unspecified site or uncertain behavior	199, 235-239
40.	Maintenance chemotherapy, radiotherapy	V58.0-V58.1, V66.1-V66.2, V67.1-V67.2
41.	Benign neoplasm, uterus	218-219
42.	Other benign neoplasms	210-217, 220-229, V71.1
43.	Carcinoma in situ, cervix	233.1
44.	Other carcinoma in situ	230-233.0, 233.2-234

See note at end of table. Source: AHCPR, Division of Provider Studies.

Appendix A—Continued
Summary diagnosis categories and ICD-9-CM codes

Category number	Diagnosis category	ICD-9-CM codes[1]
	Endocrine, Nutritional, and Metabolic Diseases and Immunity Disorders	
45.	Thyroid disorders	240-246, 794.5, V77.0
46.	Diabetes mellitus	250, 251.0, 790.2, 791.5-791.6, V77.1
47.	Other endocrine disorders	251.1-259, 794.6
48.	Nutritional deficiencies	260-269, 799.4, V12.1, V77.2
49.	Fluid and electrolyte disorders	276
50.	Other metabolic and immunity disorders	270-275, 277, 278.1-279.0, 279.11-279.13, 279.2-279.9, 783.1-783.5, 783.7-783.9, 794.7, 795.7, V07.2, V12.2, V77.3-V77.9
	Diseases of the Blood and Blood-Forming Organs	
51.	Anemias	280-285, V78.0-V78.2
52.	Coagulation and hemorrhagic disorders	286, 287, V78.3
53.	Diseases of white blood cells	288
54.	Other hematologic conditions	289, 785.6, 790.0, V12.3, V58.2, V78.8-V78.9
	Mental Disorders	
55.	Organic disorders and dementias	290.0, 290.2-290.9, 293-294, 310, 331.1-331.2, 797
56.	Presenile dementia, including Alzheimer's	290.1, 331.0
57.	Alcohol-related disorders	291, 303, 305.0, 571.0-571.3, 790.3, V11.3, V79.1
58.	Drug disorders, not alcohol related	292, 304, 305.1-305.9
59.	Schizophrenic disorders	295, V11.0
60.	Other psychoses	297, 298.1-298.9, 299
61.	Depression and affective disorders	296, 298.0, 300.4, 301.12, 309.0-309.1, 311, V79.0
62.	Anxiety and personality disorders	300.0-300.3, 300.5-300.9, 301.0, 301.10-301.11, 301.13-301.19, 301.2-301.9, 307.40-307.49, 307.8, 308, 309.81, 312.3, 316, V11.1, V11.2
63.	Eating disorders and obesity	307.1, 307.5, 783.0, 783.6, 278.0
64.	Adjustment reaction	309.2-309.7, 309.82-309.9
65.	Developmental disorders	315, 317-319, V79.2-V79.3
66.	Other mental disorders (not psychoses)	302, 306, 307.0, 307.2-307.3, 307.6-307.7, 307.9, 312.0-312.2, 312.4-312.9, 313, 314, 780.1, 780.5, 799.2, V11.8-V11.9, V15.4, V40, V66.3, V67.3, V70.1-V70.2, V71.0, V79.8-V79.9
	Diseases of the Nervous System and Sense Organs	
67.	Central nervous system infection	045-049, 139.0, 320-323, V05.0
68.	Other inflammatory diseases of the central nervous system	324-326, 781.6
69.	Parkinson's disease	332
70.	Multiple sclerosis	340
71.	Other hereditary and degenerative central nervous system diseases	330, 331.3-331.9, 333-337
72.	Paralysis	342-344, 781.4
73.	Epilepsy, convulsions	345, 780.3
74.	Headache, including migraine	346, 784.0
75.	Cataract	366
76.	Other eye disorders	360-365, 367-379, V41.0-V41.1, V42.5, V43.0-V43.1, V45.6, V52.2, V53.1, V72.0, V80.1-V80.2
77.	Otitis media and related conditions	381-383, 384.2-384.9, 385.0-385.2, 387

See note at end of table. Source: AHCPR, Division of Provider Studies.

Appendix A—Continued
Summary diagnosis categories and ICD-9-CM codes

Category number	Diagnosis category	ICD-9-CM codes[1]
	Diseases of the Nervous System and Sense Organs—con.	
78.	Conditions associated with dizziness or vertigo	386, 780.4
79.	Other ear and sense organ disorders	380, 384.0-384.1, 385.3-385.9, 388-389, V41.2-V41.3, V41.5, V53.2, V72.1, V80.3
80.	Other nervous system disorders	341, 347-359, 780.0, 781.0-781.3, 781.7, 782.0, 784.3, 784.5-784.6, 792.0, 793.0, 794.0-794.1, 796.1, V12.4, V45.2, V48.4-V48.5, V49.3, V53.0, V80.0
	Disorders of the Circulatory System	
81.	Acute and chronic rheumatic disease	390-398
82.	Hypertension	401-405, 796.2, V81.1
83.	Acute myocardial infarction	410
84.	Ischemic heart disease	411-414, 786.50-786.51, 786.59, V45.81, V81.0
85.	Diseases of pulmonary circulation	415-417
86.	Other and ill-defined heart disease	420-423, 425, 429
87.	Heart valve disorders	424, 785.2-785.3, V42.2, V43.3
88.	Conduction disorders, dysrhythmias	426-427, 785.0-785.1, V45.0, V53.3
89.	Congestive heart failure	428
90.	Cerebrovascular disease	430-438
91.	Atherosclerosis (not heart or brain)	440, 443.9, 557
92.	Aneurysm and disorders of arteries	441-442, 447
93.	Peripheral arterial embolism	444
94.	Other circulatory disease	443.0-443.8, 448, 785.4-785.5, 785.9, 793.2, 794.3, 796.3, V12.5, V15.1, V42.1, V43.2, V43.4, V47.2, V71.7, V81.2
95.	Syncope	780.2
96.	Thrombophlebitis and thromboembolism	451, 453
97.	Varicose veins of lower extremity	454
98.	Hemorrhoids	455
99.	Other diseases of veins and lymphatics	452, 456.1, 456.21, 456.3-459
	Diseases of the Respiratory System	
100.	Pneumonia and influenza	480-487
101.	Other respiratory infections (not tuberculosis)	460-466, 472-476, 510, 511.1, 513
102.	Chronic obstructive pulmonary disease and allied conditions	490-492, 494, 496, 781.5, V81.3
103.	Asthma	493
104.	Aspiration pneumonitis, food/vomitus	507.0
105.	Pleurisy, pneumothorax, pulmonary collapse	511.0, 511.8-511.9, 512, 518.0-518.2, 786.52
106.	Respiratory failure/insufficiency (adult)	518.5, 518.81-518.82, 799.1, V46.1
107.	Other lower respiratory diseases	495, 500-506, 507.1-508, 514-517, 518.3-518.4, 518.89, 519.4-519.9, 782.5, 786.0, 786.2-786.4, 786.6-786.9, 793.1, 794.2, V12.6, V42.6, V81.4
108.	Other upper respiratory diseases	471, 477-478, 519.0-519.3, 784.1, 784.4, 784.7-784.9, 786.1, V41.4, V44.0, V55.0
	Diseases of the Digestive System	
109.	Intestinal infections	001-009, V01.0, V02.0-V02.3, V03.0-V03.1, V06.0, V74.0
110.	Disorders of teeth and jaw	520-526, V52.3, V53.4, V58.5, V72.2
111.	Diseases of mouth, excluding dental	527-529, 792.4
112.	Esophageal disorders	530
113.	Gastric ulcer	531
114.	Duodenal ulcer	532

See note at end of table. Source: AHCPR, Division of Provider Studies.

Appendix A—Continued
Summary diagnosis categories and ICD-9-CM codes

Category number	Diagnosis category	ICD-9-CM codes[1]
	Diseases of the Digestive System—con.	
115.	Other peptic ulcer	533-534
116.	Gastritis, upper gastrointestinal obstruction, nausea	535-537, 787.0
117.	Appendicitis	540-543
118.	Inguinal hernia	550
119.	Other abdominal hernia	551-553
120.	Noninfectious enteritis and colitis	555-556, 558, 564.1, 564.5
121.	Intestinal obstruction without hernia	560, 564.7
122.	Diverticulosis and diverticulitis	562
123.	Anal and rectal conditions	564.6, 565-566, 569.0-569.4
124.	Peritonitis, intestinal abscess, and other disorders of peritoneum	567-568, 569.5
125.	Biliary tract disease	574-576, 793.3
126.	Liver disease, not alcohol related	570, 571.4-573, 782.4, 789.1, 789.5, 790.4-790.5, 794.8, V42.7
127.	Pancreas disorders (not diabetes)	577, 579.4
128.	Gastrointestinal hemorrhage	456.0, 456.20, 578
129.	Other gastrointestinal disorders	564.0, 564.2-564.4, 564.8-564.9, 569.6-569.9, 579.0-579.3, 579.5-579.9, 787.1-787.9, 789.2-789.4, 789.9, 792.1, 793.4, 793.6, V12.7, V44.1-V44.4, V45.3, V47.3, V53.5, V55.1-V55.4
130.	Abdominal pain	789.0
	Diseases of the Genitourinary System	
131.	Nephritis, nephrosis	580-583, 587-588
132.	Acute and unspecified renal failure	584, 586
133.	Chronic renal failure	585, V42.0, V45.1, V56
134.	Urinary tract infection	590, 595, 597, 598.0, 599.0, 788.1
135.	Calculus of urinary tract	592, 594, 788.0
136.	Other genitourinary disorders	589, 591, 593, 596, 598.1-598.9, 599.1-599.9, 788.2-788.9, 791.0-791.4, 791.7-791.9, 793.5, 794.4, V13.0, V41.7, V43.5, V44.5-V44.6, V47.4-V47.5, V53.6, V55.5-V55.6, V81.6
137.	Hyperplasia of prostate	600
138.	Other male genital disorders	601-608, 792.2
139.	Nonmalignant breast conditions	610-611.0, 611.2-611.3, 611.5-611.9
140.	Inflammation of female pelvic organs	614-616
141.	Endometriosis	617
142.	Prolapse of female genital organs	618
143.	Menstrual disorders and ovarian cyst	620.0-620.2, 625.3, 626
144.	Menopausal disorders	627
145.	Infertility	628
146.	Other female genital disorders	619, 620.3-620.9, 621-624, 625.0-625.2, 625.4-625.9, 629, V13.2, V15.7, V25-26, V45.5, V55.7, V72.3
	Complications of Pregnancy, Childbirth, and the Puerperium	
147.	Pregnancy with abortive outcome	630-639, V13.1
148.	Complications during pregnancy	640-649, 760-761, 771.0-771.2, 775.0-775.3, 792.3, V23, V28, V72.4
149.	Complications of birth, puerperium	652-676, 762-763, 767-768
150.	Normal delivery/liveborn	650-651, V22, V24, V27, V30-V37, V39

See note at end of table. Source: AHCPR, Division of Provider Studies.

Appendix A—Continued
Summary diagnosis categories and ICD-9-CM codes

Category number	Diagnosis category	ICD-9-CM codes[1]
	Diseases of the Skin and Subcutaneous Tissue	
151.	Skin and subcutaneous infections	680-686
152.	Other inflammatory conditions of skin	690, 694-695.3, 695.5-698
153.	Chronic ulcer of skin	707
154.	Other skin disorders	701.1-706, 709, 780.8, 782.1-782.3, 782.6-782.9, V13.3, V42.3, V82.0
	Diseases of the Musculoskeletal System and Connective Tissue	
155.	Auto-immune and connective tissue disease	135, 446, 695.4, 701.0, 710.0, 720
156.	Acquired foot deformities	700, 727.1, 734-735, 736.7
157.	Infective arthritis and osteomyelitis	711, 730
158.	Other joint disorders (not trauma)	712-713, 716.0, 716.2-716.9, 718.1-718.2, 718.5-718.9, 719.1-719.9, 726, 727.2-727.9
159.	Rheumatoid arthritis and related conditions	714, V82.1-V82.2
160.	Osteoarthritis	715, V13.4
161.	Spondylosis, intervertebral disc disorders, cervical disorders, other back pain	721-724
162.	Osteoporosis and other disorders of bone and cartilage	733
163.	Other acquired deformities	736.0-736.6, 736.8-736.9, 737.0-737.2, 737.33-737.4, 737.8-737.9, 738.1-738.9
164.	Other muscle, bone, connective tissue disease	710.1-710.9, 725, 727.0, 728-729, 731-732, 737.30-737.32, 739, 781.9, 793.7, V13.5, V42.4, V43.6-V43.7, V45.4, V48.1-V48.3, V48.6-V48.7, V49.0-V49.2, V49.4-V49.5, V53.7
	Congenital Anomalies	
165.	Congenital anomalies	740-759, V13.6, V82.3-V82.4, 795.2
	Certain Conditions Originating in the Perinatal Period	
166.	Perinatal conditions	764-766, 769-770, 771.3-771.9, 772-774, 775.4-775.9, 776-779, V13.7
	Injury and Poisoning	
167.	Joint disorders, trauma related	716.1, 717, 718.0, 718.3, 719.0, 830-839, 905.6
168.	Fracture of neck of femur (hip)	820, 905.3
169.	Spinal cord injury, including fracture	806, 952, 907.2
170.	Other fractures, not hip	800-805, 807-819, 821-829, 905.0-905.2, 905.4-905.5, V66.4, V67.4
171.	Sprains and strains	840-848, 905.7
172.	Intracranial injury (not fracture)	850-854, 907.0
173.	Internal injury to viscera or vessels, crushing injury	860-869, 900-904, 906.4, 908.0-908.4, 925-929
174.	Open wounds	870-897, 905.8-905.9, 906.0-906.1
175.	Complication of device or procedure	909.3, 996-999, V54.0
176.	Superficial injury, contusion	910-919, 906.2-906.3, 920-924
177.	Burns	940-949, 906.5-906.9
178.	Poisoning	960-989, 909.0-909.1, 796.0, V15.6, V82.5
179.	Other external injury	907.1, 907.3-907.9, 908.5-908.9, 909.2, 909.4-909.9, 930-939, 950-951, 953-959, 990-994, 995.1-995.9, 799.0, V15.5, V71.3-V71.6

See note at end of table. Source: AHCPR, Division of Provider Studies.

Appendix A—Continued
Summary diagnosis categories and ICD-9-CM codes

Category number	Diagnosis category	ICD-9-CM codes[1]
	Other and Cross-Cutting Conditions	
180.	Indications for plastic surgery	470, 611.1, 611.4, 738.0, V50, V51
181.	Allergic reactions	691-693, 708, 995.0, V07.1, V14, V15.0, V72.7
182.	Rehabilitation care and fitting of prostheses	718.4, V52.0-V52.1, V52.5-V52.9, V57
183.	Administrative/social admission	V20, V60-63, V65, V68
184.	Medical examination, evaluation	V70.0, V70.3, V70.5, V70.7-V70.8, V71.8-V71.9, V72.5,
185.	Other aftercare	V53.9, V54.8-V54.9, V55.8, V58.3-V58.4, V58.8-V58.9, V66.0, V66.5-V66.6, V66.9, V67.0, V67.51, V67.59, V67.6, V67.9

[1] Codes reflect valid ICD-9-CM codes as of October 1987.

Source: Agency for Health Care Policy and Research, Center for General Health Services Intramural Research, Division of Provider Studies.

Appendix B
Development of discharge weights for the Hospital Cost and Utilization Project, 1980-87

Introduction

To compute national estimates of hospital discharges using data from the Hospital Cost and Utilization Project, 1980-87 (HCUP-2), the number of discharges from each HCUP-2 hospital was multiplied by an appropriate weight that reflects the proportion of the universe represented by the hospital. This appendix summarizes the approach used to develop discharge weights, including the computation of weights, adjustment for reporting gaps, and investigation of and correction for individual hospital and stratum anomalies.

The HCUP-2 sample of hospitals was drawn from the universe of short-term, general, non-Federal hospitals in the United States with 30 or more beds. The sample was stratified along several hospital characteristics that are thought to distinguish hospital behavior. Table B-1 summarizes these characteristics and their dimensions. (For specific statistics comparing HCUP-2 with the American Hospital Association [AHA] universe of hospitals, see Coffey and Farley [1988].) The identities of the individual hospitals were unknown to the authors; only information regarding the strata characteristics and number of discharges was required for this analysis.

Definition of strata

Although 108 unique strata potentially can be defined on the basis of the characteristics shown in Table B-1, not all strata actually existed in the AHA universe. With respect to the HCUP-2 database, some existing AHA strata contained no hospitals throughout the 1980-87 period; other AHA strata contained no hospitals for individual years. The method used in developing weights required that empty strata be eliminated by collapsing categories of the stratifying characteristics. Because the HCUP-2 database underrepresents investor-owned hospitals (because of difficulties in obtaining cooperation from this sector), investor-owned and voluntary hospitals were collapsed into a single category, resulting in only two dimensions of ownership: public and private. In addition, it was decided that hospitals that change their stratum classification from year to year are probably more representative of their new stratum; thus, their weighting factor was altered accordingly and could vary over time.

Computation of discharge weights

Stratum weights were computed by dividing the number of AHA discharges from the universe of hospitals in each stratum by the number of discharges reported in the AHA survey for HCUP-2 sample hospitals. Note that the discharge weight is based on the number of discharges reported to AHA rather than the number of discharges present in the HCUP database. This approach was used to maintain consistency between the numerator and the denominator.

For any hospital that did not provide discharge data to HCUP during a period that AHA data showed the hospital to be in operation, a reporting adjustment was computed to inflate the number of available discharges for purposes of deriving weights. After the reporting adjustment was computed, some hospitals had large unadjusted-to-adjusted differences in discharge weights. A zero weight was assigned to eight hospital-years (eight different hospitals, one year each) that had unadjusted-to-adjusted weight ratios of 12 or greater.

For five hospital-years (three hospitals for one year each, one hospital for two years), data are available in HCUP-2 but no corresponding data are available from the AHA database. These hospital-years were given a zero weight because the number of AHA discharges, which is critical to computing the weights, cannot be imputed.

In order to identify major discrepancies between the two data sources, the ratio of annual AHA-reported discharges to the number of annual discharges contributed to HCUP-2 on a hospital-by-hospital basis was examined for each year. AHA-to-HCUP ratios fell outside the range of 0.7-1.3 for 55 hospital-years. All hospitals with an AHA-to-HCUP ratio of more than 3.5 were assigned a weight of zero (10 hospital-years, representing four hospitals). When individual

hospitals were given a zero weight, the weights of the remaining hospitals in the stratum were readjusted upward to represent better the universe of hospitals.

Validity of HCUP discharge weights

In order to evaluate the validity of discharge estimates obtained from HCUP data using the newly created discharge weights, weighted estimates of discharges from HCUP were compared with estimates from the National Hospital Discharge Survey (NHDS). Because the largest dropout of hospitals in HCUP occurred during 1987, a comparison for 1987 should provide the most conservative basis for assessing the validity of the weights. Table B-2 summarizes the differences between NHDS and HCUP in sampling and methods.

For comparison purposes, both 1987 and 1988 NHDS estimates were employed. The 1987 NHDS estimates were used because they correspond temporally to the 1987 HCUP discharge estimates. NHDS estimates for 1988 were also used because the methodology for NHDS was changed in that year in an attempt to provide more representative estimates of national discharges.[1] NHDS estimates are provided for the top 85 diagnosis categories, based on principal diagnosis. NHDS estimates were aggregated into categories using the classification system described in Elixhauser, Andrews, and Fox (1993).

Table B-3 describes the total number of U.S. hospital discharges as estimated from all three sources: NHDS for 1987 and 1988, HCUP-2 for 1987. NHDS estimates in this table were derived from National Center for Health Statistics annual summaries in which newborns are reported separately from other hospital discharges (Graves, 1989a, 1991a). Ratios of NHDS to HCUP discharges are provided as an indication of how closely HCUP figures approximate NHDS figures. Values close to 1 indicate a high degree of correspondence between the data sources.

Table B-4 provides this comparison on a diagnosis-specific basis using data from detailed National Center for Health Statistics publications (Graves, 1989b, 1991b). This table lists the estimated number of discharges for all three data sources as well as ratios of NHDS discharges to HCUP discharges. Ratios less than 1 indicate that NHDS discharge estimates are lower than HCUP estimates; ratios of more than 1 indicate that NHDS estimates are higher. In the following discussions of particular diagnosis categories, the numbers refer to the rank order among all HCUP discharges (column 1).

Three diagnosis categories containing delivery and newborn codes—normal delivery/liveborn (rank 1), complications of birth, puerperium (rank 2), and complications during pregnancy (rank 4)—are higher in HCUP than in NHDS. The primary reason for this difference is that NHDS does not allow ICD-9-CM codes 640-643[2] and 645-676[3] to appear as a first-listed diagnosis when birth occurred during the hospitalization; HCUP does not impose this restriction. Acute myocardial infarction (rank 12) is higher in NHDS compared with HCUP, probably because NHDS reassigns some discharges with myocardial infarction in any diagnosis field to the principal diagnosis. Among the top 85 diagnosis categories, the following 12 additional categories showed considerable discrepancy between HCUP and NHDS estimates for both years (ratios less than 0.8 or more than 1.2): maintenance chemotherapy, radiotherapy (rank 18); diabetes mellitus (rank 19); epilepsy, convulsions (rank 32); abdominal pain (rank 40); other female genital disorders (rank 42); cancer of bronchus, lung, trachea, and larynx (rank 43); syncope (rank 50); anemias (rank 56); pleurisy, pneumothorax, pulmonary collapse (rank 63); hypertension (rank 64); other eye disorders (rank 73); and other and ill-defined heart disease (rank 82).

Mean ratios of groups of disease categories are reported in Table B-5 to provide a summary measure of how closely HCUP and NHDS estimates correspond. In general, there appears to be better correspondence between HCUP and the

[1] Despite differences in the methodologies, comparison of the 1987 and 1988 NHDS estimates revealed few statistically significant differences in the number of discharges (Haupt and Kozack, 1992).

[2] The ICD-9-CM codes are hemorrhage (640, 641), hypertension (642), and vomiting (643) in pregnancy.

[3] The ICD-9-CM codes are prolonged pregnancy (645), infections (647), and other complications in pregnancy (646, 648); normal delivery (650); multiple gestation (651); malposition (652); disproportion (653); pelvic soft tissue abnormalities (654); other fetal, placental, and amniotic problems (655-658); other indications for care (659); obstructed and other abnormal labor (660-662); umbilical cord complications (663); obstetrical trauma (664, 665); postpartum hemorrhage (666); retained placenta (667); obstetrical procedure complications (668, 669); and complications of the puerperium (670-676).

1988 NHDS estimates. Because of differences in how delivery and myocardial infarction codes are handled in the two databases, mean ratios are compared both excluding the three delivery categories and excluding the delivery and myocardial infarction categories. The mean ratios for the most frequent diagnosis categories (top 50, top 25, and top 10) are also compared. In general, there is excellent correspondence between the 1987 estimates from HCUP-2 and the 1988 NHDS estimates, which were based on a sampling strategy that was revised to provide more representative estimates.

Table B-1
Hospital characteristics and dimensions

Characteristic	Dimensions			
Geographic region	Northeast North Central West South			
Location/teaching status	Rural Urban/nonteaching Urban/teaching			
Type of control	Public Investor-owned Voluntary			
Number of beds		Rural	Urban/ nonteaching	Urban/ teaching
	Small	30-85	30-145	30-325
	Medium	86-175	146-290	326-575
	Large	176 or more	291 or more	576 or more

Table B-2
Differences between NHDS and HCUP-2 samples and methods

NHDS	HCUP-2
Includes hospitals with 6 beds or more: 6,965 hospitals in sampling frame	Includes hospitals with 30 beds or more: 5,050 hospitals in sampling frame
Includes some specialty hospitals: obstetrics-gynecology; ear, nose, and throat; orthopedic; and children's	No specialty hospitals included
Sample of discharges from each hospital: ≈ 181,000 abstracts/year	Census of discharges from each hospital: ≈ 4 million abstracts/year
3-stage stratified sample with sampling proportional to size: ≈ 400 hospitals	Sample stratified by bed size, ownership, teaching status, and urban/rural location: ≈ 664 hospitals
Reassigns myocardial infarction to principal diagnosis when other circulatory diagnoses are present	No reassignment of any codes
Does not accept certain codes that are not "legal" first-listed diagnoses, e.g., ICD-9-CM codes 640-643 and 645-676 cannot be listed first when birth occurred during the hospitalization	Accepts all codes

Note: HCUP-2 is Hospital Cost and Utilization Project, 1980-87; ICD-9-CM is International Classification of Diseases, 9th Revision, Clinical Modification; NHDS is National Hospital Discharge Survey.

Table B-3
Estimated total U.S. hospital discharges: NHDS, 1987 and 1988, and HCUP-2, 1987

Item	1987 NHDS	1988 NHDS	1987 HCUP-2	1987 NHDS: 1987 HCUP-2	1988 NHDS: 1987 HCUP-2
	Discharges in thousands			Ratio	
Discharges (except newborns)	33,387	31,146	—	—	—
Newborns	3,971	3,733	—	—	—
Total discharges (including newborns)	37,358	34,879	33,713	1.11	1.03

Note: HCUP-2 is Hospital Cost and Utilization Project, 1980-87; NHDS is National Hospital Discharge Survey. HCUP-2 estimates are compared with both 1987 and 1988 estimates from NHDS because the NHDS sample was restructured in 1988 to be more representative of the universe of U.S. hospitals.

Table B-4
Comparison of national estimates of discharges based on HCUP-2, 1987, and NHDS, 1987 and 1988

Rank in HCUP		Diagnosis category[1]	1987 NHDS	1988 NHDS	1987 HCUP-2	1987 NHDS: 1987 HCUP-2	1988 NHDS: 1987 HCUP-2
			Discharges in thousands			Ratio	
1	150.	Normal delivery/liveborn	3,958	3,807	4,392	0.90	0.87
2	149.	Complications of birth, puerperium	88	55	2,265	0.04	0.02
3	84.	Ischemic heart disease	1,491	1,430	1,617	0.92	0.88
4	148.	Complications during pregnancy	504	485	911	0.55	0.53
5	100.	Pneumonia and influenza	953	969	879	1.08	1.10
6	90.	Cerebrovascular disease	894	784	808	1.11	0.97
7	170.	Other fractures, not hip	810	750	784	1.03	0.96
8	89.	Congestive heart failure	629	663	685	0.92	0.97
9	101.	Other respiratory infections (not tuberculosis)	769	717	688	1.12	1.04
10	161.	Spondylosis, intervertebral disc disorders, cervical disorders, other back pain	846	705	681	1.24	1.03
11	125.	Biliary tract disease	636	574	581	1.09	0.99
12	83.	Acute myocardial infarction	760	716	549	1.39	1.31
13	175.	Complication of device or procedure	464	491	498	0.93	0.99
14	88.	Conduction disorders, dysrhythmias	583	556	493	1.18	1.13
15	61.	Depression and affective disorders	523	576	473	1.11	1.22
16	57.	Alcohol-related disorders	484	359	407	1.19	0.88
17	103.	Asthma	454	479	407	1.11	1.18
18	40.	Maintenance chemotherapy, radiotherapy	90	180	384	0.23	0.47
19	46.	Diabetes mellitus	489	467	381	1.28	1.23
20	134.	Urinary tract infection	428	436	371	1.16	1.18
21	120.	Noninfectious enteritis and colitis	422	367	353	1.20	1.04
22	135.	Calculus of urinary tract	335	311	344	0.97	0.90
23	49.	Fluid and electrolyte disorders	357	379	326	1.10	1.16
24	151.	Skin and subcutaneous infections	322	311	298	1.08	1.04
25	137.	Hyperplasia of prostate	274	247	285	0.96	0.87
26	168.	Fracture of neck of femur (hip)	253	254	261	0.97	0.97

See note at end of table.

Table B-4—Continued
Comparison of national estimates of discharges based on HCUP-2, 1987, and NHDS, 1987 and 1988

Rank in HCUP		Diagnosis category[1]	1987 NHDS	1988 NHDS	1987 HCUP-2	1987 NHDS: 1987 HCUP-2	1988 NHDS: 1987 HCUP-2
			Discharges in thousands			Ratio	
27	118.	Inguinal hernia	301	257	266	1.13	0.97
28	147.	Pregnancy with abortive outcome	301	263	265	1.14	0.99
29	38.	Secondary malignancies	198	234	244	0.81	0.96
30	178.	Poisoning	233	193	245	0.95	0.79
31	117.	Appendicitis	274	234	237	1.15	0.99
32	73.	Epilepsy, convulsions	137	131	232	0.59	0.56
33	116.	Gastritis, upper gastrointestinal obstruction, nausea	227	189	232	0.98	0.82
34	143.	Menstrual disorders and ovarian cyst	276	234	227	1.22	1.03
35	174.	Open wounds	249	196	226	1.10	0.87
36	172.	Intracranial injury (not fracture)	241	202	218	1.11	0.93
37	121.	Intestinal obstruction without hernia	223	201	213	1.05	0.94
38	102.	Chronic obstructive pulmonary disease and allied conditions	358	235	209	1.71	1.12
39	160.	Osteoarthritis	231	205	207	1.11	0.99
40	130.	Abdominal pain	79	69	203	0.39	0.34
41	171.	Sprains and strains	254	182	202	1.26	0.90
42	146.	Other female genital disorders	275	136	193	1.43	0.71
43	16.	Cancer of bronchus, lung, trachea, larynx	298	233	187	1.59	1.25
44	42.	Other benign neoplasms	190	189	181	1.05	1.04
45	41.	Benign neoplasm, uterus	186	190	179	1.04	1.06
46	140.	Inflammation of female pelvic organs	197	164	174	1.13	0.94
47	128.	Gastrointestinal hemorrhage	204	175	171	1.19	1.02
48	107.	Other lower respiratory diseases	190	235	165	1.15	1.43
49	59.	Schizophrenic disorders	185	177	173	1.07	1.02
50	95.	Syncope	21	30	164	0.13	0.18
51	122.	Diverticulosis and diverticulitis	173	166	165	1.05	1.01
52	20.	Cancer of breast	205	175	163	1.26	1.07
53	2.	Septicemia	172	193	157	1.09	1.23
54	12.	Cancer of colon-rectum	196	161	161	1.22	1.00
55	136.	Other genitourinary disorders	176	134	159	1.11	0.85
56	51.	Anemias	212	195	155	1.37	1.26
57	119.	Other abdominal hernia	175	142	152	1.15	0.93
58	6.	Viral infections	176	169	152	1.16	1.11
59	96.	Thrombophlebitis and thromboembolism	170	142	154	1.11	0.92
60	167.	Joint disorders, trauma-related	169	152	154	1.10	0.99
61	58.	Drug disorders, not alcohol-related	197	150	144	1.37	1.04
62	165.	Congenital anomalies	238	138	145	1.65	0.96
63	105.	Pleurisy, pneumothorax, pulmonary collapse	111	103	146	0.76	0.71
64	82.	Hypertension	302	267	147	2.06	1.82
65	80.	Other nervous system disorders	218	116	143	1.52	0.81
66	142.	Prolapse of female genital organs	146	125	141	1.04	0.89
67	179.	Other external injury	156	97	139	1.12	0.70
68	127.	Pancreas disorders (not diabetes)	136	128	136	1.00	0.94
69	162.	Osteoporosis and other disorders of bone and cartilage	190	152	135	1.41	1.13
70	158.	Other joint disorders (not trauma)	130	107	134	0.97	0.80
71	109.	Intestinal infections	135	144	126	1.07	1.14
72	112.	Esophageal disorders	145	147	122	1.19	1.20

See note at end of table.

Table B-4—Continued
Comparison of national estimates of discharges based on HCUP-2, 1987, and NHDS, 1987 and 1988

Rank in HCUP		Diagnosis category[1]	1987 NHDS	1988 NHDS	1987 HCUP-2	1987 NHDS: 1987 HCUP-2	1988 NHDS: 1987 HCUP-2
			Discharges in thousands			Ratio	
73	76.	Other eye disorders	163	162	122	1.33	1.32
74	113.	Gastric ulcer	111	114	114	0.98	1.00
75	25.	Cancer of prostate	128	123	112	1.14	1.10
76	141.	Endometriosis	108	99	113	0.96	0.88
77	166.	Perinatal conditions	107	138	110	0.97	1.25
78	91.	Atherosclerosis (not heart or brain)	120	129	115	1.05	1.13
79	114.	Duodenal ulcer	109	99	109	1.00	0.91
80	180.	Indications for plastic surgery	111	96	108	1.03	0.89
81	173.	Internal injury to viscera or vessels, crushing injury	106	74	108	0.98	0.69
82	86.	Other and ill-defined heart disease	126	122	102	1.24	1.20
83	108.	Other upper respiratory diseases	87	83	101	0.86	0.82
84	176.	Superficial injury, contusion	106	85	98	1.08	0.87
85	138.	Other male genital disorders	120	85	97	1.23	0.87

[1] For a description of diagnosis codes comprising each diagnosis category, refer to Elixhauser, Andrews, and Fox (1993).

Note: HCUP-2 is Hospital Cost and Utilization Project, 1980-87; NHDS is National Hospital Discharge Survey.

Table B-5
Correspondence between NHDS and HCUP-2 estimates for discharges from U.S. hospitals

Estimate	1987 NHDS: 1987 HCUP-2	1988 NHDS: 1987 HCUP-2
	Ratio	
All diagnosis categories	1.10	0.96
All categories excluding delivery categories	1.12	0.98
All categories excluding delivery categories and myocardial infarction	1.12	0.97
Top 50 categories excluding delivery categories and myocardial infarction	1.06	0.96
Top 25 categories excluding delivery categories and myocardial infarction	1.05	1.01
Top 10 categories excluding delivery categories and myocardial infarction	1.06	0.99

Note: HCUP-2 is Hospital Cost and Utilization Project, 1980-87; NHDS is National Hospital Discharge Survey. Delivery categories are normal delivery/liveborn; complications during pregnancy; and complications of birth, puerperium.

Appendix C
Standardization

When comparing the morbidity or mortality experience of different population groups, it is possible for comparisons to be biased by differences among the populations in the distribution of certain underlying characteristics. For example, because age and sex are important determinants of morbidity and mortality, variations in the age or sex composition of different populations can dramatically influence comparisons of these rates. Therefore, when comparing morbidity or mortality experience among population groups, it is advisable to control for the potential influence of such factors in either the design or the analysis of the study. Among the options available for controlling for extraneous factors at the time of the analysis is standardization of rates (Mausner and Kramer, 1985).

With the direct method of standardization, the observed data from each comparison group (e.g., black patients and white patients) are initially stratified on the basis of different categories of the characteristics that are to be controlled (e.g., age and sex). The observed stratum-specific rates for the outcome of interest (e.g., the discharge rate) are then determined. For each comparison group, the observed stratum-specific rates are then multiplied by the total number of individuals within similarly defined strata of a standard population. The results of these calculations represent the expected number of occurrences of the outcome in the standard population, had the observed stratum-specific rates of the comparison groups prevailed.

Typically, for each comparison group, the expected number of occurrences of the outcome is summed over all strata and divided by the total number of subjects in the standard population to yield an overall "adjusted" rate. The adjusted rate is expressed in units comparable with the original measure (e.g., procedures per 100,000 population or discharges per 100,000 population). Because the observed stratum-specific rates for each comparison group have been applied to the same standard population, variations in the composition of the comparison groups relative to the stratification variables do not influence the comparison of the overall adjusted rates.

The choice of the standard population is not critical. It could represent the combination of the comparison groups; or it could be derived from U.S. or State vital statistics data; or it could, for that matter, be artificially constructed. However, it is important to note that the magnitude of the adjusted rates is not invariant to the choice of population standard; therefore, one set of adjusted rates should not be compared with another set of rates adjusted on the basis of a different standard population. In this investigation, U.S. Bureau of the Census data for 1970 were used as the standard in computing all adjusted rates. An example of age standardization of rates is provided in Table C-1, illustrating the potential impact of this methodology.

This hypothetical example demonstrates how it is possible for substantial differences between groups based on a comparison of crude overall rates (3,327 versus 737 deaths per 100,000 population) to disappear when the comparison is based on adjusted rates (908 versus 908 deaths per 100,000 population). When the observed stratum-specific rates for each comparison group were applied to the same standard population, variations in the composition of the comparison groups relative to age did not influence the comparison of the overall adjusted rates. It is also possible for true differences between populations to be masked when comparisons are based solely on crude rates. In this case, only after adjustment do the differences become apparent.

Table C-1
Hypothetical example of standardization of mortality rates by age

Age group	Observed population A			Observed population B			Standard population	Expected deaths	
	Number of deaths	Population size	Death rate[1]	Number of deaths	Population size	Death rate[1]		Population A	Population B
5 years and under	75	3,000	2,500	2,000	80,000	2,500	10,000	250	250
6-10 years	85	17,000	500	850	170,000	500	30,000	150	150
11-20 years	50	50,000	100	180	180,000	100	80,000	80	80
21-30 years	160	80,000	200	320	160,000	200	160,000	320	320
31-40 years	480	120,000	400	560	140,000	400	220,000	880	880
41-50 years	840	140,000	600	720	120,000	600	220,000	1,320	1,320
51-60 years	1,280	160,000	800	640	80,000	800	160,000	1,280	1,280
61-70 years	1,800	180,000	1,000	500	50,000	1,000	80,000	800	800
71-80 years	8,500	170,000	5,000	850	17,000	5,000	30,000	1,500	1,500
81 years and over	20,000	80,000	25,000	750	3,000	25,000	10,000	2,500	2,500
Total population	—	1,000,000	—	—	1,000,000	—	1,000,000	—	—
Total observed deaths	33,270	—	—	7,370	—	—	—	—	—
Observed rate[1]	—	—	3,327	—	—	737	—	—	—
Total expected deaths	—	—	—	—	—	—	—	9,080	9,080
Adjusted rate[1]	—	—	—	—	—	—	—	908	908

[1] Rate per 100,000 population.

Appendix D
Recalculation of confidence interval estimates

The large number of statistical comparisons made possible by the data included in this report increases the likelihood of identifying significant differences that are due to chance alone. This could have been mitigated by using a more conservative alpha level. However, in light of the exploratory nature of this investigation, a 0.05 alpha level was used in constructing confidence intervals about the point estimates shown in the tables. This appendix provides information necessary to construct more restrictive confidence interval estimates (CIEs) for assessing differences in particular procedure categories.

Standard error for a rate

The CIEs reported for discharge rates were based on the usual method of computation:

$$\text{Lower limit CIE} = \text{rate} - 1.96 \times \text{SE (rate)}$$

$$\text{Upper limit CIE} = \text{rate} + 1.96 \times \text{SE (rate)}$$

where SE (rate) is the standard error of the rate.

The tables provide sufficient information to enable confidence intervals to be recalculated using different levels of significance. The value of the rates may be obtained directly from the tables, but the standard error must be derived from the information provided. To do so, simply set the above equation equal to the lower limit of the CIE and solve for the SE as shown below.

$$\text{SE (rate)} = \frac{(\text{lower limit CIE}) - (\text{rate})}{-1.96}$$

Standard error for EAPC

The estimated annual percent change (EAPC) is derived by fitting a regression line to the natural logarithm of the discharge rates, using calendar year as the independent variable. The equation for calculating the EAPC is given below, where m is the slope of the regression line:

$$\text{EAPC} = 100 \times (\exp^{m} - 1)$$

The value of the slope may therefore be obtained as the solution to the following equation:

$$m = \ln\left[1 + \frac{\text{EAPC}}{100}\right]$$

The lower limit (ll) of the confidence interval is calculated in the following manner:

$$\text{Lower limit CIE} = 100 \times \left(\exp^{m - 1.96\,(\text{SE}\,(m))} - 1\right)$$

The standard error of the slope can be derived from the above equation as follows:

$$\text{SE}(m) = \frac{\left[\ln\left(1 + \frac{\text{lower limit CIE}}{100}\right)\right] - m}{-1.96}$$

Example

These equations could easily be programmed into a spreadsheet software package to quickly and easily recalculate CIEs for a number of different diagnoses. An example of the steps necessary to recalculate the confidence interval is given below, using the EAPC and associated confidence interval for diagnosis category 2 (septicemia) among black patients (EAPC = 20.1; 95-percent CIE = 14.9, 25.5).

$$m = \ln\left[1 + \frac{\text{EAPC}}{100}\right] = \ln\left[1 + \frac{20.1}{100}\right] = 0.1832$$

$$\text{SE}(m) = \frac{\left[\ln\left(1 + \frac{ll\ \text{CIE}}{100}\right)\right] - m}{-1.96}$$

$$= \frac{\left[\ln\left(1 + \frac{14.9}{100}\right)\right] - 0.1832}{-1.96} = 0.0226$$

Substitution of the derived values of the slope (m) and its SE, along with a different alpha level, into the equation below enables a more restrictive confidence interval to be calculated. An example is provided for constructing a confidence interval corresponding to a two-tailed test with alpha equal to 0.005:

$$\begin{aligned} \text{CIE} &= 100 \times \left(\exp^{\,m \pm Z_{\frac{\alpha}{2}}(\text{SE}(m))} - 1 \right) \\ &= 100 \times (\exp^{\,0.1832 \pm (2.81 \times 0.0226)} - 1) \\ &= (12.7, 28.0) \end{aligned}$$

Provider Studies Research Notes

No.	Title (Author) and Order Number	Date
1	Project Overview (Hornbrook) NTIS Accession No. PB84-111566	June 1983
2	Patients in Public General Hospitals: Who Pays, How Sick? (Coffey) PHS Pub. No. 83-3344	Sept. 1983
3	Characteristics of Financially Distressed Hospitals (Kelly and O'Brien) NTIS Accession No. PB84-111574	June 1983
4	Who Receives Cesareans: Patient and Hospital Characteristics (Goldfarb) NTIS Accession No. PB85-124766	Sept. 1984
5	Sole Community Hospitals: Are They Different? (Farley) PHS Pub. No. 85-3348	Mar. 1985
6	Utilization of Hospital Inpatient Services by Elderly Americans (Garnick and Short) PHS Pub. No. 85-3351	June 1985
7	Competition Among Hospitals: Market Structure and Its Relation to Utilization, Costs, and Financial Position (Farley) PHS Pub. No. 85-3353	Aug. 1985
8	Use of Short-Term General Hospitals by Patients With Psychiatric Diagnoses (Wallen) PHS Pub. No. 86-3395	Oct. 1985
9	Case Mix and Treatment Patterns of Medicaid and Privately Insured Psychiatric Patients in Short-Term General Hospitals (Wallen) PHS Pub. No. 87-3402	Oct. 1986
10	HCUP-2 Project Overview (Coffey and Farley) PHS Pub. No. 88-3428	July 1988
11	Trends in Hospital Average Lengths of Stay, Casemix, and Discharge Rates, 1980-85 (Farley) PHS Pub. No. 88-3420	Apr. 1988
12	Urban and Rural Hospital Costs: 1981-85 (Hogan) PHS Pub. No. 88-3419	Apr. 1988
13	The 50 Most Frequent Diagnosis-Related Groups (DRGs), Diagnoses, and Procedures: Statistics by Hospital Size and Location (Lemrow and others) PHS Pub. No. 90-3465	Sept. 1990
14	Financially Distressed Hospitals: A Profile of Behavior Before and After PPS (Rizzo) PHS Pub. No. 90-3467	Sept. 1990
15	AIDS in U.S. Hospitals, 1986-87: A National Perspective (Ball and Turner) AHCPR Pub. No. 91-0015	July 1991
16	Pediatric AIDS-Related Discharges in a Sample of U.S. Hospitals: Demographics, Diagnoses, and Resource Use (Ball and Thaul) AHCPR Pub. No. 92-0031	Feb. 1992
17	Clinical Classifications for Health Policy Research: Discharge Statistics by Principal Diagnosis and Procedure (Elixhauser and others) AHCPR Pub. No. 93-0043	Aug. 1993
18	Intermittent Positive Pressure Breathing: Old Technologies Rarely Die (Duffy and Farley) AHCPR Pub. No. 94-0001	Dec. 1993
19	The National Bill for Diseases Treated in U.S. Hospitals: 1987 (Andrews and others) AHCPR Pub. No. 94-0002	Feb. 1994
20	Trends in Hospital Procedures Performed on Black Patients and White Patients: 1980-87 (Elixhauser and others) AHCPR Pub. No. 94-0003	Apr. 1994
21	Are Contract-Managed Hospitals More Efficient? (Dor) AHCPR Pub. No. 94-0004	Apr. 1994
22	Trends in Hospital Procedures: Regional Variations, 1980-87 (Elixhauser and others) AHCPR Pub. No. 95-0002	Dec. 1994
23	Trends in Hospital Diagnoses: Regional Variations, 1980-87 (Elixhauser and others) AHCPR Pub. No. 95-0003	Feb. 1995
24	Trends in Hospital Diagnoses for Black Patients and White Patients: 1980-87 (Elixhauser and others) AHCPR Pub. No. 95-0048	June 1995

Research Notes 1, 3, and 4 are available from the National Technical Information Service (NTIS), Springfield, VA 22161; telephone (703) 487-4650. Single copies of all other publications are available from the AHCPR Publications Clearinghouse, P.O. Box 8547, Silver Spring, MD 20907; telephone 800-358-9295.

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